

The CHEMIST AND DRUGGIST

for RETAILER - WHOLESALER - MANUFACTURER

Established 1859

28 Essex Street, Strand, London, W.C.2

Registered as a Newspaper

No. 3005
VOL. CXXVII

SEPTEMBER 11, 1937

Annual Subscription (with
Diary) 20/- Single Copies 9d.

HOT WATER BOTTLES

that will increase your sales!

The name DUNLOP, world-famed for service and satisfaction, is your finest assurance for rapid and easy selling of these quality hot water bottles. They are made in styles and prices to suit every customer . . . they are backed by National advertising. Order your stocks now.

The DUNLOP ALL-RUBBER MOULDED BOTTLE illustrated is high pressure moulded from the toughest rubber and can be sold with the utmost confidence that it will give typical 'Dunlop' satisfaction. "Cellophane" wrapped.

Fixed Retail Price **2/11**New type, with handle **3/3**

- DUNLOP ANIMAL SERIES HOT WATER BOTTLES. Fascinating for children.

"KITTY", "TEDDY", "BUNNY", "DOGGY".
Uncovered, each **3/11**

Covered in velvet, each **5/9**

"RED RIDING HOOD", including red head cover
each **4/6**

- DUNLOP MOULDED FABRIC INSERTION BOTTLE
New type, with handle **4/6**

- DUNLOP HAND-MADE FABRIC INSERTION BOTTLES
In white, from **5/6** In red, from **6/6**

- DUNLOP COSIMAX. An entirely new kind of hot water bottle. Standard size **10/6**

Senior size **14/11**

Specially shaped Cosimax Footwarmer

10/6

Dunlop
ALL-RUBBER
MOULDED BOTTLE

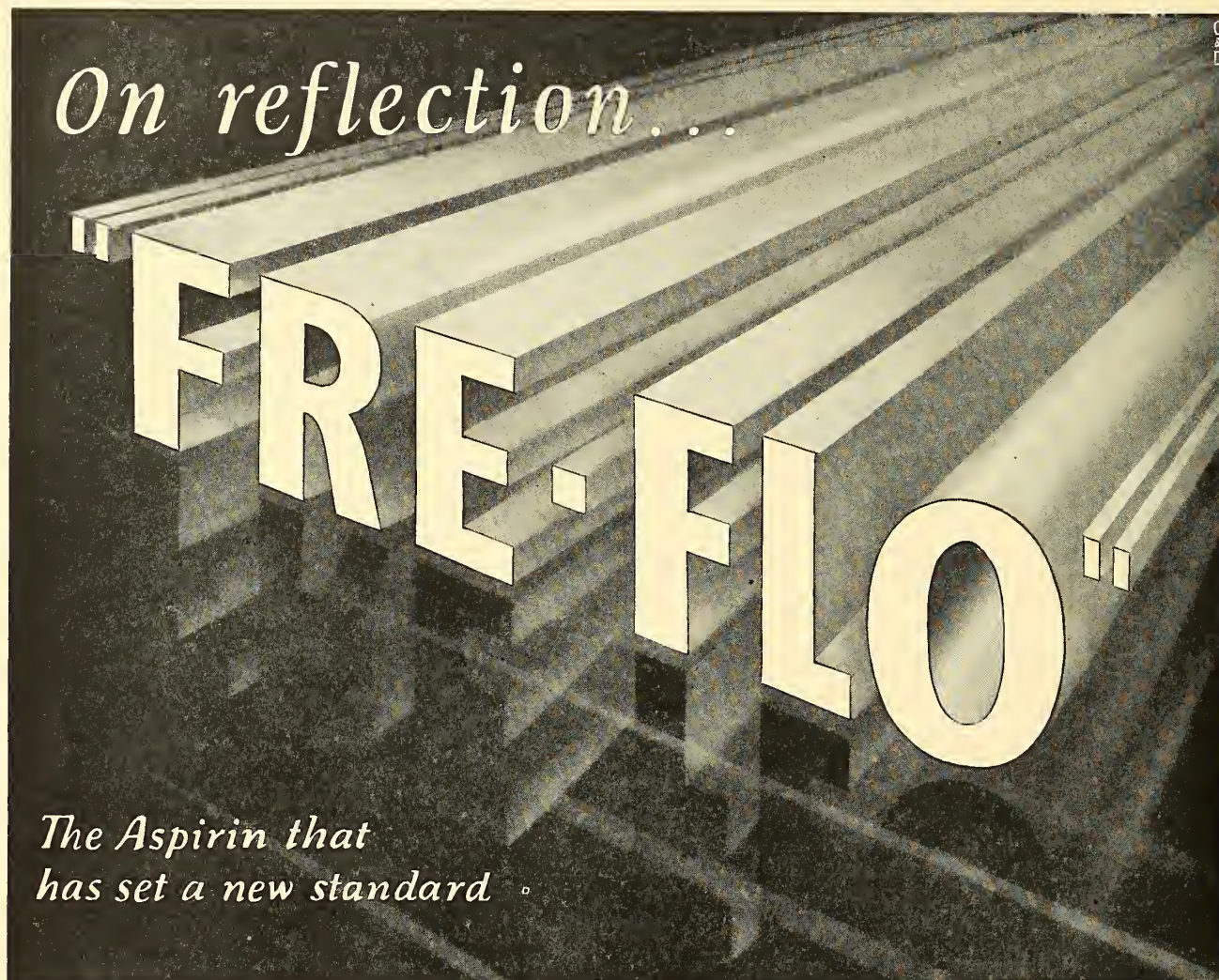
2/11

In Red only.

Dunlop

HOT WATER BOTTLES

DUNLOP RUBBER COMPANY LIMITED (General Rubber Goods Division), CAMBRIDGE STREET, MANCHESTER, 1



On reflection...

FRE-FLO

*The Aspirin that
has set a new standard*

MANUFACTURED BY
W. J. BUSH & CO. LTD.
LONDON

SOLE SELLING AGENTS:
H. W. GRAESSER-THOMAS LTD.
49 LEADENHALL STREET, LONDON, E.C.3

ROYAL 3011 - 6111

"UNOMEE, FEN, LONDON."



GLAXO LABORATORIES LTD.

announce

PRODUCTS OF THE
GLAXO LABORATORIES

NEW 4'6

(12oz) SIZE OF

SYRUP

MINADEX

Repeated requests from the retail trade have clearly shown that there is a ready market awaiting this new size of Syrup Minadex G.L., the mineral and vitamin tonic that has met with such outstanding success in all quarters.

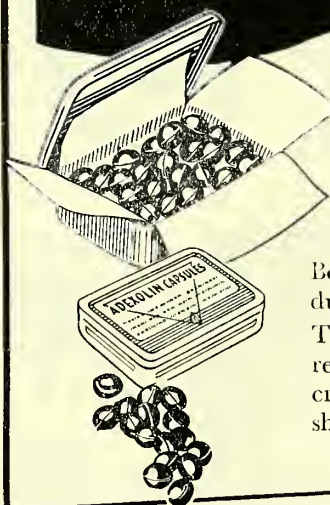
SPECIAL DISPLAY PARCEL

To introduce the new 4'6 size a special Display Parcel of 1 doz. 12-oz. bottles is offered. This parcel shows 33 $\frac{1}{3}$ % on sales and is the best method of securing a stock of the new size.



Adexolin Capsules

PRICES REDUCED



Continued increase in the sales of Adexolin Capsules has permitted a substantial reduction in the prices of the 25 and 100 packs.

Boxes of 25 (hitherto 2/9 each) will now retail at 2/6.

Boxes of 100 (formerly 8/6) are reduced to 7/6.

The prices of the tins of 500 and 1,000 remain un-changed. Claims for cash credit in respect of these changes should be sent as soon as possible.

ADEXOLIN SPECIAL DISPLAY PARCELS

The season for vitamin preparations is almost here. Stock up with Adexolin on special display terms, (33 $\frac{1}{3}$ % on sales). Three parcels each are available for Adexolin Capsules and Adexolin Liquid.

OSTO-CALCIUM NEW DISPLAY PARCELS

Stock and display the calcium and vitamin D preparation that doctors prefer. The price is right: 2/3 per tin of 50 tablets; 4/- per 100. The preparation is right—7 $\frac{1}{2}$ grs. calcium sodium lactate and 500 international units of vitamin D per tablet. Special display terms now available show you 33 $\frac{1}{3}$ % on sales.

FULL PARTICULARS OF DISPLAY PARCELS
MAY BE OBTAINED ON REQUEST.

(Available from Sept. 6th, 1937.)

Not applicable in the I.F.S.

GLAXO LABORATORIES LTD., GREENFORD, MIDDLESEX. 'Phone BYRon 3434

Famed Through 5 Royal Reigns

HARLENE-HAIR-DRILL

HARLENE

HAIR GROWER & TONIC

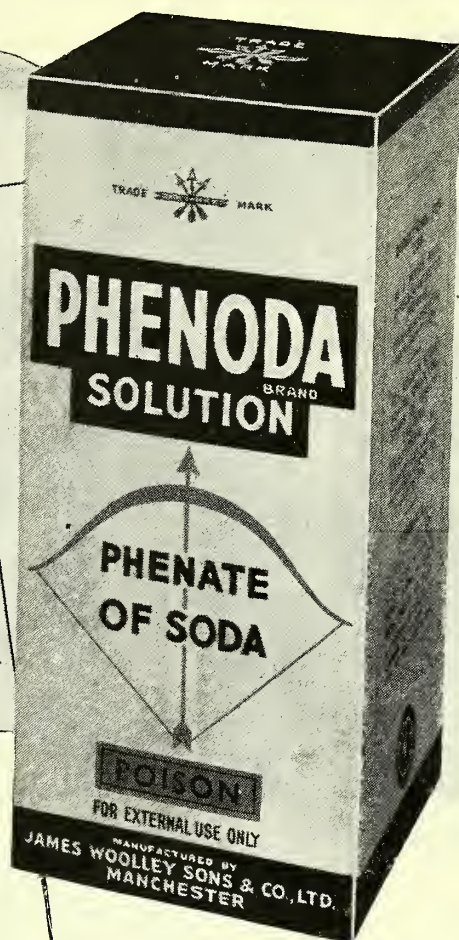
CREMEX SHAMPOO
UZON BRILLIANTINE
HARLENE WAVE-SETTING
LOTION
ASTOL HAIR COLOUR
RESTORER
HARLENE CAMOMILE
GOLDEN HAIR WASH
HARLENE CAMOMILE
SHAMPOO
HARLENE HAIR CREAM
HARLENE ^{Soapless}
^{Brushless} SHAVING
CREAM

Through Five Royal Reigns the name of "HARLENE" has stood paramount and supreme, and the demand for these popular Hair Toilet Preparations continues to grow and grow and GROW!

Constantly being brought before the Public by a Bold, Compelling Advertising Campaign, they enjoy an all-the-year-round demand. See that **you** carry adequate stocks of these fast-selling lines! For full particulars, prices, trade terms and show cards write:

EDWARDS HARLENE LTD.

20-26 Lamb's Conduit Street, London, W.C.1



**REPACKING
A FAMOUS
PRODUCT**



For 50 years Woolley's Phenate of Soda has been preferred by Doctors and Dentists as a safe, sure germicide for use as a mouthwash, gargle or antiseptic dressing. Now under its modernised name of Phenoda (Brand) Solution, and packed in a striking new carton, it is a more attractive proposition than ever. Retail Prices : 1/6 and 2/9 P.A.T.A.

WOOLLEY'S

PHENODA BRAND

SOLUTION (Phenate of Soda)

JAMES WOOLLEY SONS & CO. LTD.
VICTORIA BRIDGE, MANCHESTER, 3



**INCREASE
YOUR SALES**

Cadbury's have received testimonials from doctors, nurses, cyclists, business men and women, and thousands of other modern energetic people who have found Bourn-vita an invaluable aid in keeping up vitality.

SELL . . .

AND RECOMMEND

Cadbury's

BOURN-VITA
THE IDEAL FOOD-DRINK



INDEX TO ADVERTISERS

Allen, Stafford, & Sons, Ltd. (Essential Oils)	7	Cadbury Bros. (Bourn-Vita)	4	Fairy Dyes, Ltd. (Morning Pride Shaving Cream)	11
Armstrong Cork Co., Ltd. (Corks, &c.) xiv		Caldicot Tin Stamping Works, Ltd. (Decorated Tins)	xiii	Fennings, A. (Children's Cooling Powders)	Leader Page
Aspro, Ltd. (Aspro)	Cover iii	Cartwright, W. B., Ltd. (Chemists' Exhibition)	6	Fink, F., & Co. (Gums)	12
Association of Manufg. Chemists, Ltd. Col. Supp.		Cephos, Ltd. (Headache Remedy, &c.) vii		Foyles Libraries, Ltd. (Books)	12
Ayrton, Saunders & Co., Ltd. (Wholesale Druggists)	Cover iv	Chemist and Druggist, The ... Leader Page		Gale, Baiss & Co., Ltd. (Cod Liver Oil Emulsion)	v
Barker, R. W., & Co. (Patent Agents) 12		Cox, A. H., & Co., Ltd. (Pills and Tablets)	8	Garfield Tea Co.	Leader Page
Bayer Products, Ltd. ('Luminal')	Leader Page	Croda, Ltd. (Olive Oil)	12	Genatosan, Ltd. (Genasprin, &c.)	xvi
Bell, John, Hills & Lucas, Ltd. (Lotil Suntan Lotion)	Leader Page	Dick, W. B., & Co., Ltd. (Liquid Paraffin)	vi	General Surgical Co., Ltd. (Hypodermic Syringes, &c.)	xi
Blyton, Astley & Co., Ltd. (Lozenges, &c.)	x	Domo Remedies, Ltd. (Domolene, &c.) x		George, Ernest J., & Co. (Valuers, &c.) Col. Supp.	
Box 309/261 (Toilet Goods, &c.)	8	Drake & Dahm (Derris and Pyrethrum Products)	12	Glaxo Laboratories, Ltd. (Adexolin Capsules, &c.)	1
Britton, Malcolm & Waymark, Ltd. (Hypodermic Needles)	xiii	Dudley & Co., Ltd. (Fixtures and Counters)	xv	Graesser, N. H. (Phenol B.P. &c.) Cover iv	
Brook, Parker & Co., Ltd. (Tablets, Pills, etc.)	x	Dunlop Rubber Co., Ltd. (Hot Water Bottles)	Front Cover	Graesser Salicylates, Ltd. (Aspirin B.P. &c.)	Cover iv
Brooks & Warburton, Ltd. (Belzema Ointment, &c.)	ix	Edwards Harlene, Ltd. (Hair Toilet Preparations)	2	Graesser-Thomas, H. W., Ltd. (Aspirin "Fre-Flo")	Cover ii
Buckley-Bowker Tablet Co., Ltd. (Tablets, &c.)	ii	Elboz, L., & Sons (Metal Smallwares)	xiv	Grout & Co., Ltd. (Vic Wrist Support) x	
Burgoyne Burbidges & Co., Ltd. (Dispensing Requirements)	i	Evans, Gadd & Co., Ltd. (Drugs, &c.) v		Hadfield, Henry, Ltd. (Bottle Boxes)... xiii	
Burrough, James, Ltd. (Alcohol for Perfumery)	Leader Page	Evans Sons Lescher & Webb, Ltd. (Vaccines)	14	Harris, Hart & Co., Ltd. (Epsom Salts, Glauber Salts, &c.)	ii
Burroughs Wellcome & Co. ('Kepler' Cod Liver Oil with Malt Extract) ... 15		Everett, S. & R. J., & Co., Ltd. (Hypodermic Needles)	xii	Heward, R. H., & Co. (Surgical Appliances)	xii
				Hewlett, C. J., & Son, Ltd. (Insect Bite Cream, &c.)	viii

[Continued overleaf.]

Extracts

TINCTURES RESINOIDS
OLEO-RESINS MEDICINAL RESINS

CAPSICIN AND GINGERIN

WILLIAM RANSOM & SON
 ESTABLISHED 1846 *Ltd*

Manufacturing Chemists
HITCHIN near LONDON

INDEX—cont.

Hill, Thos., Engineering Co. (Hull), Ltd. (Bottle Washing Machinery) ...	10	Neill, J., & Co. (Sheffield), Ltd. (Eclipse Razors and Blades)	8	Schering, Ltd. ('Medinal,' &c.)	Leader Page
Hohson, Trimble & Co., Ltd. (Feet Plaisters, &c.)	xii	Northern Polytechnic	12	Scott & Turner, Ltd. (Andrews Liver Salt)	vi
Hosezene Co., Ltd., The (Sanitary Towels)	x	Norwegian Cod Liver Oil	ix	Scurr, C. A. (Optical Tintion)	12
Hubbuck, T., & Son, Ltd. (Oxide of Zinc)	iv	Old Strand Chemical & Drug Co., Ltd. (Pharmaceutical Chemicals, &c.)	12	Sharplin, W. J., Ltd. (Stoppers)	10
Iglodine Co., Ltd. (Iglodine)	viii	Orridge & Co. (Valuers, &c.) ... Col. Supp.		Simpkin, A. L., & Co., Ltd. (Chemists' Exhibition)	vi
Jackson, J. G., & Crockett, Ltd. (Filling Machines)	xv	Pakcel, Ltd. (Cellophane)	10	Smith, Martin H., Co. (Ergeapiol)	vi
Josephs, Philip, & Sons, Ltd. (Shop-fittings)	Col. Supp.	Perry & Hope, Ltd. (Phosphate of Soda)	Leader Page	Smith, T. & H., Ltd. (Alkaloids)	iii
King, J. C., Ltd. (Showcases and Shopfittings)	10	Pifco, Ltd. (Sharpex Stoppers)	xii	Solazzi Liquorice	iv
Lanalol, Ltd. (Hair Preparation)	9	Pitman, Sir Isaac, & Sons, Ltd. (Books)	12	Solport Bros., Ltd. (Christmas Fancy Sundries)	9
Lauder, L. T. (Filling Machines)	xv	Potter & Clarke, Ltd. (Wholesale Druggists)	13	Sonthalls (Birmingham), Ltd. (Sanitary Towels)	xiii
Lennon, Ltd. (South African Agencies)	iii	Prentif, Ltd. (Contraceptive Products)	xii	South of England College of Pharmacy	xiv
Levermore, A., & Co., Ltd. (Precipitated Chalk)	12	Prescott, A. (Cocoa Butter, &c.)	iv	Standard Synthetics, Ltd. (Pure Essential Oils, &c.)	iii
London College of Pharmacy	12	Prideaux's, Ltd. (English Dried Milk)	x	Sterns, Ltd. (Oils, Petroleum)	vii
Low, Son & Haydon, Ltd. (Toilet Preparations)	12	Proprietary Agencies, Ltd. ("California Syrup of Figs")	16	Sumner's Ty-phoo Tea, Ltd. ...Leader Page	
Matthews, D., & Sons, Ltd. (Shopfittings)	Col. Supp.	Purfinol, Ltd. (Liquid Paraffin, &c.) ...	ii	Thurley, G. E., & Son (Liquid Paraffin)	viii
Maund, F., & Berg, E., Ltd. (Showcases)	Col. Supp.	Ransom, W., & Son, Ltd. (Extracts) ...	5	Tokalon, Ltd. (Poudre Tokalon)	10
Methylating Co., Ltd. (Methylated Spirit)	16	René Cos, Ltd. (Veloshave)	11	Wilson & Mansfield, Ltd. (Eucalyptus Oil)	v
Napp, H. R., Ltd. (Hallbut-Liver Oil)	Leader Page	Reynolds & Branson, Ltd. (Surgical Sundries)	xii	Woolley, J., Sons & Co., Ltd. (Phenoda Solution)	3
National Association of Opticians	12	Riddell, Francis, Ltd. (Pag Hand Inhaler)	vii	Yestamin Co. (Dried Yeast Powder and Tablets)	12
		Rivista Italiana delle Essenze dei Profumi e delle Piante officinali	viii	Zeal, G. H., Ltd. (Clinical Thermometers)	Cover iv
		Roberts & Newton (Labels)	10	Zimmermann, A. & M. (Chemicals) ...	iv
		Roberts' Patent Filling Machine Co., Ltd.	xiii		
		Rose, J. L., Ltd. (Pyrogallie Acid, &c.) ..	ii		
		Rudduck & Co. (Shopfittings)	xiv, Col. Supp.		

STAND
C
21
CHEMISTS
EXHIBITION

Profitable lines at
CARTWRIGHTS

"A reputation for good judgment is itself a fortune."

Start the winter season with Cartwright's famous profitable lines — highest quality products at lowest possible prices.

If unable to visit our Stand, C.21, send for a copy of this illustrated brochure without delay.

(. . . . that is, of course, if our Mailing Dept. has "slipped-up" and not already sent you one.)



W. B. CARTWRIGHT LTD RAWDON, LEEDS

StaffAllenS

ESSENTIAL OILS

OWN DISTILLED AND IMPORTED

Wholesale only



CLOVE PEPPERMINT
ANISEED THYME
LAVENDER CUBEB
ROSEMARY JUNIPER
SANDALWOOD PINE

Both StaffAllenS imported, and own distilled Essential
Oils are of the finest quality; distilled from the
best raw materials; imported from the most reliable
sources; scrupulously tested before being sent out.
Send us your enquiries and orders.

STAFFORD ALLEN & SONS L^{TD}

MANUFACTURING CHEMISTS & ESSENTIAL OIL DISTILLERS.

COWPER STREET, FINSBURY, E.C.2. LONDON, ENG.

Established 1833



SECTIONS OF TWO PACKING DEPARTMENTS

PILLS & TABLETS

MANUFACTURED AND SUPPLIED IN BULK OR

★ PACKED

Facilities for the complete production of PRIVATE PROPRIETARIES

From Artist's SKETCH to the final PACK!

- ★ ORIGINAL AND EXCLUSIVE DESIGNS
- ★ PRINTING
- ★ BOXMAKING
- ★ SHOW MATERIAL

LABELLING MACHINES

SECTION OF OUR PRINTING AND STUDIO DEPARTMENTS

MAY we quote for your REQUIREMENTS?

COX

Estab. 1839 BRIGHTON

MANUFACTURERS OF TOILET GOODS, PATENT MEDICINES, FOODSTUFFS, POLISHES, etc., interested in the undermentioned proposition, are requested to communicate with BOX NO. 309/261 of this journal.

A Bombay firm, with branches throughout British India, having considerable financial resources, is interested in agencies for this market. Sole agencies or sole distribution rights, with or without manufacturer's advertising, will be considered. The firm is prepared to arrange and finance advertising at its own risk for deserving products. If desired an initial order will be placed to demonstrate goodwill.

Manufacturers wishing to extend sales of lines already established on the Indian market are also requested to communicate with the advertiser.

The Managing Director of the Bombay office, now in London, is available for personal interviews.

The razor for the connoisseur



With Magnetic Pick-up in Handle

This razor which takes any type of double edge wafer blade is a sound selling line. Furthermore its use with Eclipse Super Blades gives that high degree of Shaving Comfort which earns for the dealer an indisputable reputation for quality.

Eclipse

RAZORS and BLADES

Retail Prices:—
10/6, 5/6, 3/6
Blades 5 for 1/8

Obtainable from your usual Wholesaler or direct from the Sole Manufacturers:

JAMES NEILL & CO. (SHEFFIELD) LTD., SHEFFIELD 11.

F. 125



SECURE THIS ATTRACTIVE WINDOW SHOW

Great interest has been created by the extensive advertising of this product in the National Papers and Women's Journals. Millions of people see our announcements every week.

STOCKS OBTAINABLE FROM
ALL WHOLESALE HOUSES

P.A.T.A. TERMS

Write for particulars to
LANALOL LTD.

57-60 Holborn Viaduct, London, E.C.1

6 REASONS why

SOLPORT'S range of Autumn and Christmas Fancy and Druggists' Sundries *should be YOUR choice*

1. The widest selection of **POWDER PUFFS** ever offered, and under the guarantee of the "Nerissa" "Hall-Mark."
2. A selection of no less than 12 different qualities in **HOT WATER BOTTLE COVERS** to choose from.
3. New lines in "PORTIA" and "WATERSPRITE" **TOILET REQUISITES**.
4. **IRRESISTIBLE PACKINGS** which will pull your sales more than ever before.
5. **GIFT PACKS** and **PRESENTATION SETS** in an extensive variety.
6. **QUICK DELIVERIES** from the stock of all the best wholesalers throughout the country, or direct (invoiced through wholesaler) if preferred.

Visit our showrooms where you will be very welcome and we are confident that our new ranges will please you

SOLPORT
BROTHERS LIMITED

— ILLUSTRATED PRICE LISTS now ready —

184-192 GOSWELL RD., LONDON, E.C.1

Telephone : Clerkenwell 9211

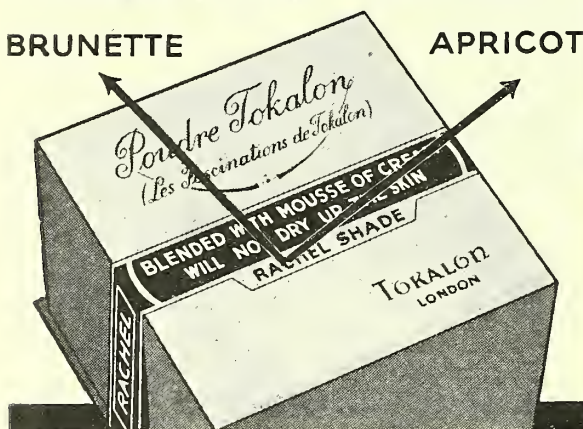
New SHADES POUDRE TOKALON

The most widely advertised
Face Powder in the World.

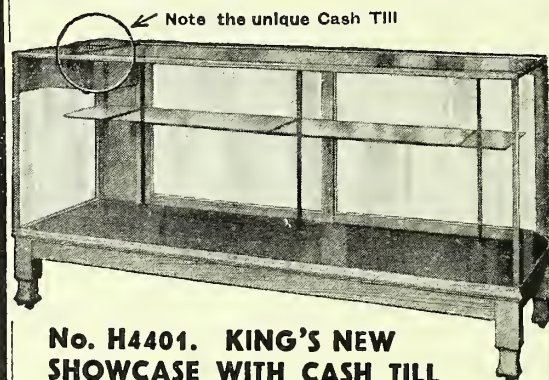
WRITE FOR TRADE TERMS
TOKALON Ltd. CHASE ROAD,
LONDON, N.W.10

BRUNETTE

APRICOT



KING'S FOR SHOWCASES & SHOPFITTINGS



No. H4401. KING'S NEW SHOWCASE WITH CASH TILL

This very useful showcase can be supplied with an oak or mahogany frame. Glazed with new first quality drawn plate glass, $\frac{1}{4}$ " thick. Interior fitted with standard bar and adjustable brackets and a plate glass shelf 12" wide. Fitted with a cash till at top which takes the minimum of display space from the interior. Size overall:—6' long x 3' high x 2' back to front.

PRICE £10 : 0 : 0 COMPLETE.

WE WILL BE PLEASED TO FORWARD OUR COMPLETE CATALOGUE OF FIXTURES AND FITTINGS No. 1013 POST FREE ON APPLICATION.

J. C. KING, LTD.

42-60 Goswell Road, London, E.C.1

Telephones: CLERKENWELL 2316 (6 lines)

Telephone: National 1631.

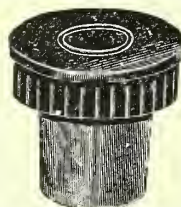
ROBERTS & NEWTON

Label & General Printers,
DOMINION HOUSE,
BARTHOLOMEW CLOSE,
LONDON, E.C.1

Printers to the Drug Trade for over 40 years.

Labels imprinted BY RETURN.

COMPOSITION STOPPERS BAKELITE MOULDINGS COMPACTE COSMETIC & ROUGE BOXES



200 Varieties
Any Colour.

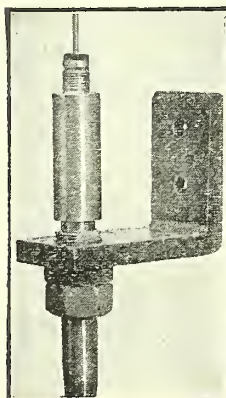
A suitable Composition Stopper will enhance the selling value of your package. Let us fit your Bottles and quote you.



W. J. SHARPLIN, Ltd.

Middle Lane Works, Hornsey, LONDON, N.8

Telephone: Mountview 3952



SPRINKLER BOTTLES

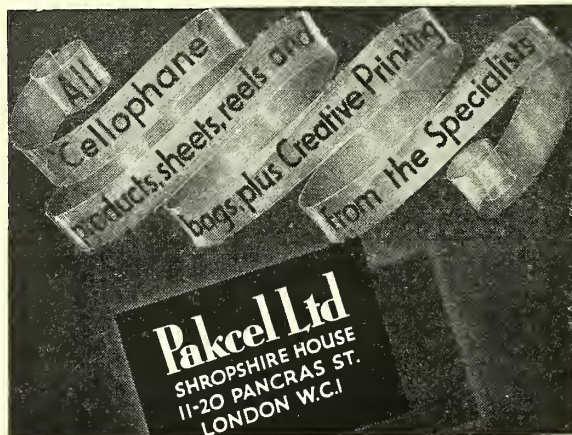
Automatic Rinsing

Can be connected to the town's water supply by metal or india rubber hose pipe.

By merely passing the mouth of the bottle over the jet and pressing the bottle downwards water is automatically sprayed into the bottle. The water completely drains away from the bottle as it is withdrawn.

Further particulars may be obtained from the makers:—

**The THOMAS HILL
Engineering Co. (HULL), Ltd.**
9 PARK LANE, STEPNEY, HULL



Putting it over big . . .

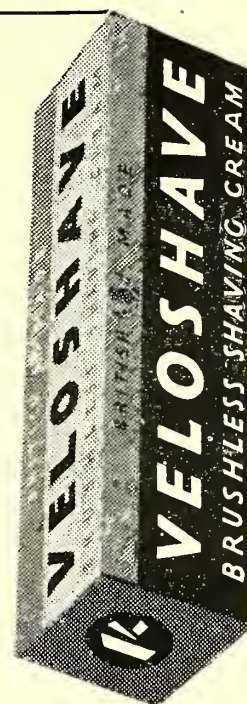


ASHLEY

1 National Advertising for Veloshave—the finest Brushless shaving cream obtainable—will continue throughout the Autumn and Winter. We shall be supporting you in the Daily Mail, Daily Express, Daily Telegraph, Birmingham Mail and in the Scottish National and Provincial papers.

2 We shall supply you with 'Ashley' Cartoon Counter Displays tying up with our Press Campaign.

3 We ask you to show our well-designed pack prominently, so as to take the fullest advantage of the requests for Veloshave that our Advertising will bring.



THE LUXURY BRUSHLESS SHAVING CREAM FULL SIZE TUBES 1/- & 6d.

Write to : RENE COS LTD., 9 QUEEN VICTORIA ST., LONDON, E.C.4 or to 44 WEST GEORGE ST., GLASGOW, C.2



WATCH FOR THEM IN—

London Evening
Standard
Sunday Express
Sunday Dispatch
Sunday Chronicle
Sunday Times
John Bull
Sunday Mail
Sunday Post
Sunday Weekly
Glasgow Herald
Scottish Field
Tablet
Tit-Bits

WATCH SALES SOAR!

WATCH YOUR STOCKS!

New National Advertising Campaign
to consolidate the success of **MORNING PRIDE**

"Morning Pride" has taken premier place in the shaving cream market. First in public favour "Morning Pride" is second to none in rapidly increasing sales.

Look to your stocks and be sure of your share of profits from this new wonder shaving cream.

MORNING PRIDE

REGD.

THE RAZOR READY BRUSHLESS SHAVING CREAM

PRODUCT OF FAIRY DYES LTD., PHARMACEUTICAL DEPT.
For particulars of attractive Initial Order terms write

SOLE DISTRIBUTORS - FASSETT & JOHNSON LTD

86 CLERKENWELL ROAD LONDON. E.C.1

PRECIPITATED CHALK

LIGHTEST—MEDIUM—DENSE.

And All Other Grades To Suit Every Purpose
Prepared Chalk B.P. and Powdered Talc.

*Phons: Mansion House 7300. Tel. Add.: "Levermore, Phone, London."

A. LEVERMORE & CO. LTD. ABC Codes.
110 CANNON STREET, LONDON, E.C.4. 6th Edition

FULL-TIME COURSES will commence on Oct. 6th
PRELIMINARY SCIENTIFIC CHEMIST & DRUGGIST QUALIFYING
Benches now being reserved
SUMMER REVISION COURSES for P.S. and C. & D.
Just commencing
£1 1s. 6d. per week for SEPT. Exams.

LONDON COLLEGE of Pharmacy

Founded by H. WOOTTON, B.Sc. C. W. GOSLING, Ph.C.
Principal—IRVINE RANKIN, B.Sc., Ph.C.

SPECIALISTS in TRAINING PHARMACISTS

Apply for Prospectus to—

361 CLAPHAM ROAD, S.W.9

Telephone:
Brixton 2161

"Essentials of Pharmacy"

New Edition
4/6 post free

GUMS TRAGACANTH AND ACACIA

As Imported or Finely Powdered
ALL GRADES

FREDK. FINK & CO., 10 & 11 Mincing Lane, London E.C.3

Telephone: Mansion House 5094

Eau de Cologne . . . Lavender Water

ALL TOILET PREPARATIONS

Low, Son & Haydon, Limited

5 QT. QUEEN ST., LONDON, W.C.2 COURT
TELEPHONE: HOLBORN 4007 EST. 1790 PERFUMERS

DERRIS & PYRETHRUM PRODUCTS

The most efficient Insecticides for all agricultural and horticultural pests

KONTAX Pyrethrum-Derris Extract

NOVO-TOX The most efficient insect killer yet devised

Prices and samples from Sole Agents:

DRAKE & DAHM, 22 Bartlett's Buildings, LONDON, E.C.4

PHARMACEUTICAL CHEMICALS ALKALOIDS, ESSENTIAL OILS

Digitalin Xst (Digitoxin)

OLD STRAND CHEMICAL AND DRUG CO. LTD.

PHONE: HOL. 6093 AUDREY HOUSE, ELY PLACE, LONDON, E.C.1

Are you stocking

YESTAMIN?

Dried Yeast in its most concentrated and most convenient form—powder and tablets. Generous terms and good discounts. *Write today to:*
THE YESTAMIN CO. (The English Grains Co. Ltd.) Shobnall Rd. Burton-on-Trent

For all grades of Olive Oil write for samples and prices to
CRODA LTD.
GOOLE, YORKS
Phone: Hawcliffe 40 & 41
Grams: Croda, Goole

ALL GRADES

London Office:
Burnley House, Willesden, N.W.10

FOYLES

Twopenny Libraries

Full particulars of this profitable sideline from:
Foyles Libraries Ltd., 119-125 Charing Cross Rd., London, W.C.2
Telephone: Gerrard 5660 (12 lines)

PATENTS AND TRADE MARKS

PROTECTED AT HOME AND ABROAD
BOOKLET GRATIS

REGINALD W. BARKER & Co.

56 LUDGATE HILL, LONDON, E.C.4.

Telephone City 5140

NORTHERN POLYTECHNIC, Holloway, London, N.7

T. J. Drakeley, D.Sc., Ph.D. (Lond.), F.I.C., F.I.R.I., F.C.S.—Principal.
Recognised Day courses for the PHARMACEUTICAL and 1st and 2nd Medical Examinations. Evening courses for the Intermediate PHARMACY and 1st Medical Examinations. The Inter. B.Pharm. Examination gives exemption from the Preliminary Scientific Examination. Day and Evening Courses in CHEMISTRY, PHYSICS, MATHEMATICS, BOTANY, ZOOLOGY, and GEOLOGY for Internal and External DEGREE EXAMINATIONS of the University of London. Evening Classes for MATRICULATION subjects. Special Courses in RUBBER TECHNOLOGY and in GLASS-BLOWING.

NEW SESSION BEGINS 20th SEPTEMBER, 1937

Prospectus post free on application to the Head of the Department—R. W. West, D.Sc. (Lond.), A.R., J.S., F.I.C.
Telephone: NORTH 1686.

RECOGNISED OPTICAL QUALIFICATION

The next examination for the Fellowship Examination of the National Association of Opticians will be held at Liverpool in January, 1938.

REVISED SYLLABUS, &c.

SECRETARY, N.A.O. 130 Princes Rd., Liverpool 9

Third Edition

PRACTICAL PHARMACEUTICAL CHEMISTRY

By F. N. Appleyard and C. G. Lyons. A systematic course for students preparing for the Qualifying Examination of the Pharmaceutical Society.
159 pages. 6/6 net (by post 6/11).

"We commend it warmly to teachers and students."—TECHNICAL JOURNAL

PITMAN, Parker St., Kingsway, London, W.C.2

OPTICAL TUITION

FOR THE

S.M.C., B.O.A. and N.A.O. DIPLOMA Examinations

Particulars:—

C. A. SCURR, F.S.M.C., F.B.O.A., F.N.A.O., F.I.O., F.C.O., M.P.S.

50 HIGH STREET, BARNET, LONDON, N.

KASBAH
(REGISTERED)
KIDNEY CURE
PRICE **9^D**

KASBAH FOR ALL KIDNEY COMPLAINTS

KASBAH
(REGISTERED)
KIDNEY CURE
A POSITIVE CURE FOR
Backache, Gravel, and all Diseases
of the Kidneys and Bladder

KASBAH
(REGISTERED)
KIDNEY CURE
PREPARED SOLELY
BY
NATURE'S IDEAS

This extremely effective
Showcard, 18 in. x 14 in.
in full oriental colours
supplied with all orders

RETAIL **9^d** PACKET
P.A.T.A.
per doz. 5/-

POTTER & CLARKE LTD.

60-64 ARTILLERY LANE, LONDON, E.1

'Grams : "Horehound, Phone, London."

'Phone : Bishopsgate 4761 (6 lines).

AND AT 77 DANTZIC STREET, MANCHESTER, 4

'Grams : "Horehound, Manchester."

'Phone : Blackfriars 8734.



"COMMON COLD"

AND

ANTI-CATARRH VACCINE (EVANS)

(LOCAL STRAINS)

For Prophylaxis and Treatment

The facilities of the pathological laboratories at **EVANS' BIOLOGICAL INSTITUTE** enable us to issue vaccines prepared from organisms collected in the locality in which the vaccine is to be used. It will be appreciated that such vaccines are highly specific, producing a greater proportion of successful results compared with ordinary Stock Vaccines.

The following formulæ have been evolved, after many years' experience, as having a comprehensive selection of organisms as found in numbers of typical cases, in the correct proportions.

"COMMON COLD" & ANTI-CATARRH VACCINE (EVANS) "COMMON COLD" & ANTI-CATARRH VACCINE (EVANS)
(No. 3, for Prophylaxis) (No. 1, for Treatment)

<i>M. catarrhalis</i> ...	200 million	} per cc.
<i>Diplococci pneumoniae</i> ...	200 "	
<i>Streptococci</i> ...	200 "	
<i>B. Friedlander</i> ...	100 "	
<i>B. septi</i> ...	100 "	
<i>Staphylococci (alb. et aur.)</i> ...	200 "	
<i>M. tetragoni</i> ...	100 "	
<i>B. influenzae</i> ...	100 "	

<i>M. catarrhalis</i> ...	50 million	} per cc.
<i>Diplococci pneumoniae</i> ...	50 "	
<i>Streptococci</i> ...	50 "	
<i>B. Friedlander</i> ...	25 "	
<i>B. septi</i> ...	25 "	
<i>Staphylococci (alb. et aur.)</i> ...	50 "	
<i>M. tetragoni</i> ...	25 "	
<i>B. influenzae</i> ...	25 "	

DOSAGE—PROPHYLACTIC (Vaccine No. 3)

In general, a series of three injections (given before the season during which the person is usually susceptible) is recommended. The initial dose is 0.25 cc. followed by 0.5 cc. after an interval of seven days, and a further 1 cc. after another week or so.

DOSAGE—CURATIVE (Vaccine No. 1)

In acute conditions an initial dose of 0.1 cc. or 0.2 cc. and in chronic conditions 0.25 cc. The initial dose may be repeated after three days. If no reaction is produced, subsequent injections can be larger.



EVANS' "COMMON COLD" AND ANTI-CATARRH VACCINES (Local Strains) are issued as follows :

Boxes of 3×1 cc. Ampoules, No. 3 Vaccine (Prophylaxis) ... 7/6 per box Also in 5 cc. 8/6, 10 cc. 15/9, and 25 cc. 26/-
Boxes of 6×1 cc. Ampoules, No. 1 Vaccine (Treatment) ... 14/- per box bottles and in single Ampoules, 2/9

Made in England at EVANS' BIOLOGICAL INSTITUTE by

Evans Sons Lescher & Webb Ltd.

Liverpool and London



Be Prepared

Now is the time to prepare for the seasonal demand for cod liver oil with malt extract.

The established reputation of 'KEPLER' COD Liver Oil with MALT Extract is such that regular display will enable you to divert malt and oil business from less remunerative channels. Keep it displayed on the counter and in the window throughout the autumn and winter.

Colourful counter
and window display
sales-aids on request

TRADE **'KEPLER'** MARK

COD Liver Oil **MALT** Extract
with

London Prices
to the Trade 24/6 and 43/6 per doz. bottles
(Subject):



BURROUGHS WELLCOME & CO., LONDON

G 2019

COPYRIGHT

Combined Quantity Discounts on

"CALIFORNIA SYRUP OF FIGS"

BRAND
LAXATIVE

(REGD.)

★ **PHILLIPS' DENTAL MAGNESIA**

★ **"MILK OF MAGNESIA"**

(REGD.)

★ **"DANDERINE"**

(REGD.)

SPECIAL PARCEL

12½% will be allowed on orders value £6 comprised of items marked ★ above, 7½% being allowed on "California Syrup of Figs" ordered at the same time. Cash 30 days.

ALL DISCOUNTS ARE CONDITIONAL UPON 14 DAYS' WINDOW OR COUNTER DISPLAY

PROPRIETARY AGENCIES, LTD.

179-181 ACTON VALE, W.3

'PHONE : SHEPHERD'S BUSH 4435

£3

Assortment of goods
Through your Wholesaler only

5% Cash 30 days

£6

Assortment of goods

7½%
Cash 30 days

You can always get immediate attention and supplies from us



We also manufacture
**SPECIAL QUALITY SPIRITS
FOR MEDICAL AND TOILET
PREPARATIONS AND B.P.
STANDARD SPIRITS**

Depots in all parts of the country



Phone us for

METHYLATED SPIRITS

THE METHYLATING CO., LTD. Regd. Office Pall Mall East, London, S.W.1

WIRES: "METHCOLIM. PRONE, LONDON"

'PHONE : WHITEHALL 6964

BRANCHES: LONDON, BIRMINGHAM, LIVERPOOL, MANCHESTER, BRISTOL, GLASGOW, LEITH, HULL

The CHEMIST AND DRUGGIST

for RETAILER - WHOLESALER - MANUFACTURER

The official organ of The Pharmaceutical Society of Ireland, The Pharmaceutical Society of Northern Ireland, The Chemists' and Druggists' Society of Ireland, and of other Chemists' Societies in Overseas Dominions

Published Weekly at

28 ESSEX STREET, STRAND, LONDON, W.C.2

Telegrams : "Chemicus, Estrand, London"

Telephone : Central 6565 (10 lines)

BRANCH OFFICES

MANCHESTER : 4 CANNON STREET (TEL. : BLACKFRIARS 3052)
SHEFFIELD : 54 FOSTER'S BUILDINGS, HIGH STREET (TEL. : 22458)
GLASGOW : 19 WATERLOO STREET (TEL. : CENTRAL 2329)
BIRMINGHAM : 111 NEW STREET (TEL. : MIDLAND 2921)

AUSTRALIA : 19 QUEEN STREET, MELBOURNE, C.1
NEW ZEALAND : 55a SHORTLAND STREET, AUCKLAND
PARIS : 155 AVENUE DE WAGRAM, XVII^e (TEL. : ÉTOILE 19-79)
AMSTERDAM-C. HOLLAND : PLANTAGE FRANSCHELAAN 32

News of the Week

British Standards Institution

The British Standards Institution has issued a specification for haemocytometer counting chambers and haemocytometer dilution pipettes, which has been prepared with the co-operation of the medical profession. In framing the specification particular attention has been paid to the various tolerances specified. The accuracy of a blood count depends on the skill of the operator in obtaining a representative sample, in carrying out the dilution, and in the use of the counting chamber. It is also limited by the errors of the apparatus employed. In the preparation of this specification particular attention has been paid to the latter sources of error. The accuracy of the final count depends, for example, on the accuracy of a number of elements of the counting chamber, e.g., accuracy of ruling, accuracy of depth, departure of under surface of cover glass from a plane, etc. In view of the number of possible sources of error the tolerances on individual elements had of necessity to be kept small in order to avoid the possibility of a comparatively large error in the final count due to an accumulation of small errors. On the basis of measurements carried out at the National Physical Laboratory on samples submitted by manufacturers as representative of current production, the tolerances were also related to the degree of accuracy attainable in manufacture without unduly increasing the cost of production. Copies of this specification (No. 748-1937) may be obtained from the British Standards Institution, 28 Victoria Street, London, S.W.1, price 2s. 2d. post free.

Bakers' and Confectioners' Exhibition

The forty-first annual Bakers', Confectioners' and Allied Traders' Exhibition and Market, held at the Royal Agricultural Hall, Islington, London, N.1, from September 4 to 10, occupied the whole of the main and Gilbey halls and upper gallery. The exhibition had an international flavour because, in addition to the Irish and Scottish divisions, there was included, on the competition side, an American section. Another innovation was the award of a solid silver "Jubilee" cup to mark the jubilee of the National Association of Master Bakers and Confectioners, which occurred this year. Over ten thousand entries (a record number) were received for the various competitions which are always a feature of this exhibition, and from the populous appearance of the aisles most of the competitors attended to learn the fate of their entries. To mark Coronation year, all medals awarded were engraved with Coronation designs. Cinema side-shows included "The March of Health," dealing with the British bread industry, and the Canadian Wheat Board film "Beyond the Sunset." Among the exhibitors were EVANS SONS LESCHER & WEBB, LTD., Liverpool, who were showing the improved Liverpool Virus for dealing with rats and mice. BRITISH DIAMALT CO. (H. A. & D. Taylor, Ltd.), Sawbridgeworth, were exhibiting liquid and dry malt extracts and malt flowers. CONDRUP, LTD.,

London, were demonstrating fruit-juice pressing-machines. At the stand of WILLIAM GARDNER & SONS (GLOUCESTER), LTD., Gloucester, was a comprehensive array of sifting, mixing, spraying, grinding machinery, and cereal cooking apparatus. In a demonstration of the various ways in which gas can be applied to the industry, the GAS LIGHT & COKE CO., London, made effective use of a series of photographs. The GENERAL ELECTRIC CO., LTD., London, at a nearby stand, were furthering the rival claims of electric ovens. Up-to-date methods of handling and recording cash in the shop were being shown at the stands of G. H. GLEDHILL & SONS, LTD., Halifax, and the NATIONAL CASH REGISTER CO., LTD., London. Gumstrip rolls and carriers were the chief items displayed at the stand of SAMUEL JONES & CO., LTD., London. One of the best positions in the exhibition, at the "bottle-neck" near the entrance, was secured by J. C. KING, LTD., London, who had two stands, one featuring showcases, wall fixtures and counters; and the other automatic models for window attraction, flowers, posters and showcards. Of particular interest was a miniature turntable operated at trivial cost.

Lighting Display

One of the miniature exhibitions staged from time to time by the Electric Lamp Manufacturers' Association of Great Britain, Ltd., is now open at the Lighting Service Bureau, 2 Savoy Hill, London, W.C.2. Any chemist who is in search of ideas as to how his shop lighting can be improved would do well to pay it a visit. He would be able to determine, for example, whether he could make use of the recently introduced mercury vapour bulbs in his window lighting. A model window shows how the makers recommend profiting by the peculiar properties of these lamps. Lamps of this type are economical in use, giving a high intensity of illumination with less current consumption than tungsten-filament lamps of similar wattage, but they cannot be used alone. For one thing, they take quite a few minutes to get "warmed up" to full brilliancy. Moreover, they cause unpleasant distortion of colours, similar to that experienced under certain systems of highway illumination. This latter defect is overcome at the exhibition by using one row of tungsten-filament lamps and one of mercury vapour lamps, the total wattage consumed by this method being considerably less than if the requisite number of tungsten lamps were employed. Another feature of the exhibition is a comparison of a diffusion-method in one showcase with a direct (parabolic reflector) type in another. The latter proves unsuitable for goods of a certain class, notably cartons which are wrapped in transparent tissue, and a diffusion screen overcomes this drawback, the direct method being more suitable for goods in which a high proportion of reflection, producing glitter,

CONTENTS
See p. 303

is desirable. Other exhibits include models showing the effect of dim lighting on retina images, the effect of various tints of light on objects of different kinds, and the use of strip lighting to illuminate lettering on glass panels in doors, window signs, etc.

Anglesey

The Anglesey, North Caernarvonshire and Colwyn Bay Branch of the National Pharmaceutical Union has been running a series of simultaneous window-displays throughout the summer months. Preparations which have already been featured are Marshall's lysol; Lysantol; Zant; Opas stomach powder; Glucose D; Nujol; Mistol; Genasprin and Genozo tooth paste. It is intended to arrange for displays of Brooklax, Beltona and T.C.P. during September, October and November. The secretaries report abundant support by members.

Birmingham

The annual general meetings of the National Pharmaceutical Union branch, the branch of the Pharmaceutical Society, and the Birmingham Pharmaceutical Association are to be held on Tuesday, September 14, at the Imperial Hotel, Temple Street, at 8.30, 9 and 9.30 p.m. respectively.

Mr. John P. Atkinson, chemist and druggist, Birchfield Road, has purchased the branch business of Mr. J. Frost, chemist and druggist, 86 Nechells Park Road, Birmingham. Mr. J. Frost, Walmley, Erdington, and Boldmere, Sutton Coldfield, has opened a new pharmacy at 113 The Parade, Sutton Coldfield, to which address communications should be sent.

Leeds

At Leeds, on September 7, an inquiry was held into the circumstances attending the death of a three-years-old child, following the swallowing of tablets containing strychnine. According to medical evidence about twenty tablets were found in the child's stomach. Margery Kay, the mother, stated that the tablets were in an ornament on the mantelpiece. She had in all eight boxes from the Public Assistance Committee. The doctor told her they contained iron, but she did not know there was anything else in them. In returning a verdict of "Death by misadventure" the Coroner said: There is no doubt that this child has died from strychnine poisoning, following the taking of these tablets. The mother has put the city to the cost of supplying eight boxes and only taken a few tablets.

London

A Buyers' Week in the fancy goods section at British Industries House, Marble Arch, London, W.1, was opened on September 6. Mr. Victor Tattersall, J.P., pointed out that a permanent exhibition such as that at British Industries House gave buyers a comprehensive opportunity and had certain advantages over the ordinary trade fair. Mr. Best declared that quite early in his business career he had learned the value of exchange of ideas. The advantages over earlier secretive methods were clearly to be seen in British trade during the last thirty years. An exhibition such as the present, where manufacturers and merchants co-operated, was the best possible market for trade buyers, and he was astounded that there were not more such centres in London. "Why not one for each industry," he concluded. Presentations to the speaker and to the chairman were made by Miss Isobel Watson, who was acting as hostess during the week.

The first organised outing of the London Pharmacy Ramblers will take place on Sunday, September 12. Intending ramblers are asked to meet at Elstree Station at 11.7 a.m.; carriages have been reserved on a train from St. Pancras to Elstree leaving at 10.35 a.m. (return fare, 1s. 3d.). The walk will be through ten or eleven miles of Hertfordshire country. Lunch should be carried and tea at about five o'clock has been arranged at the Village Institute, Aldenham. Pharmacists, assistants and friends are invited.

Manchester

A comprehensive range of toilet articles in connexion with Christmas trade will be displayed by the Bartlett Distributing Co. at the Deansgate Hotel from September 13 to 17.

The result of the competition, played on September 1, for the prize given by Bayer Products, Ltd., to the Manchester and District Golfing Society was as follows:—C. L. Compston, 71; G. S. Woolley, 72; V. Cromack, 74; J. A. Swain, 74.

Irish Notes

Belfast

Nominations in connexion with the annual elections to the Pharmaceutical Council of Northern Ireland will be received up to September 20 at the offices of the Society, 73 University Street, Belfast. The five members who retire by rotation are Messrs. S. S. Badger, J.P., Magherafelt; S. H. Forrest, Belfast; C. Abernethy, Belfast; and J. T. Nicholl, Belfast (pharmaceutical representatives); and Mr. John F. Grimes, J.P., Pomeroy (druggist representative).

On the invitation of Mr. A. Steede (president, Ulster Chemists' Association) the members of the Executive Committee had an outing on August 25 to Cushendall. Several members made an earlier start to enjoy an afternoon's shooting over the game preserves adjacent to Cushendall, in which Mr. Steede has a proprietary interest. The main party, on arriving at Cushendall, were taken up by the picturesque mountain route to the shooting lodge, where light refreshments were served, following which an agreeable hour was spent amidst the magnificent scenery. On being joined by the shooting party, all visitors returned to Cushendall, where Mr. Steede entertained members to tea in Delargy's Hotel. After tea Mr. R. Linehan (vice-president) proposed a vote of thanks to Mr. Steede. Mr. T. McGregor seconded, and was supported by Mr. E. A. Richey. Mr. Steede, replying, thanked members and expressed the opinion that more social contact among chemists in Northern Ireland would encourage closer co-operation which was so desirable. The return journey to Belfast was completed by ten o'clock. Picture on page 297.

Dublin

Miss Kathleen F. Campbell, M.P.S.I., has acquired the business of Mr. John P. Crowe, M.P.S.I., 16 South Richmond Street, Dublin. Mr. Crowe has acquired the Sandycove Pharmacy of Mr. J. J. Fitzgibbon, M.P.S.I., Sandycove, Dun Laoghaire, who has retired.

Mr. F. J. Fitzpatrick (treasurer, Pharmaceutical Society of Ireland) has suffered a bereavement in the death of his sister, Mrs. A. G. O'Byrne, which occurred in Dublin on September 4. Mrs. O'Byrne was at one time in pharmacy, and served her apprenticeship with her brother, but left business some twenty years ago on the occasion of her marriage.

Miscellaneous

THE BRONZE MEDAL of the *Hospitalité de Lourdes* has been conferred on Mr. J. J. Kerr (registrar of the Pharmaceutical Society of Ireland) for his services as *brancardier* during many years.

TRADE WITH VISITORS.—While the prolonged building strike in Dublin has adversely affected pharmacy in the Free State capital, chemists in rural parts—particularly the tourist areas and seaside resorts—report brisker business.

Scottish Notes

Miscellaneous

An outbreak of fire occurred on September 7 in the chemist's shop at 17 Great Western Road, Glasgow, occupied by John McMillan, Ltd. Damage was not extensive.

CHANGE OF ADDRESS.—A. L. Simpkin & Co., Ltd., are removing their Scottish depot from 27 Old Wynd, Trongate, to 20-30 Spoutmouth, Glasgow (Telephone: Bell 730). Mr. L. Ward will be in charge as supervisor. Mr. A. L. Macfarlane has been appointed a representative in Scotland.

MEDICAL BENEFIT EXTENSION PROPOSAL.—The Insurance Committee for Lanark, at a meeting in Glasgow on August 25, unanimously adopted a resolution urging the Government to give the opportunity to small business people, clerks and farm servants of participating in medical benefit like other workers. The resolution is to be submitted to the annual conference of Scottish Insurance Committees at Oban. Sir William Marshall intimated that they had received a communication from the Department of Health that the Government had decided to start in the autumn a national publicity campaign. It was agreed to co-operate with the Department.

Pharmacy Act Prosecutions

AT Alcester (Warwickshire) Police Court, on September 6, Jack Griffiths, the Drug Stores, Bidford-on-Avon, was summoned for unlawfully using the title "chemist" in connexion with the sale of goods by retail on May 10. He pleaded "Not Guilty." Mr. A. C. Castle, for the Pharmaceutical Society, who prosecuted, said the proceedings were under Section 3 (1) of the Pharmacy and Poisons Act, 1933. Defendant carried on a drug store business at Bidford, but he had no pharmaceutical qualifications at all. On the day in question an inspector visited defendant's premises and saw on the outside of the shop a sign in the form of a thermometer on one side of which were the words "Dispensing chemist." He told the inspector that he had pasted a piece of paper over those words but that the rain had washed it off. He (Mr. Castle) suggested that this kind of offence was a very serious one from the public point of view. Charles A. McClosky, an inspector under the Act, deposed that on the day named he visited defendant's premises at Bidford where he carried on a drug store business. Outside the shop he saw an enamel sign. There was a thermometer in the middle of the sign and on one side were the words "Dispensing chemist." He interviewed defendant, who told him that he usually kept a piece of paper over the words "Dispensing chemist" but the rain had washed it off. He produced a copy of the "Register of Chemists and Druggists" which did not contain defendant's name. Cross-examined by defendant: He went into the shop and asked defendant if he could sell him a certain preparation. He told him he did not sell it. Defendant: Didn't I explain to you that I was not a qualified chemist and druggist and was not allowed to sell that preparation? Witness: I do not remember. Defendant produced the sign, and in his evidence said the rain had washed the paper off the words "Dispensing chemist." This happened the day before the inspector called. Cross-examined by Mr. Castle: I suggest that the words had been uncovered since May 6; in fact, earlier than that. Witness: I do not agree. He added that he first found the paper was off when the inspector called his attention to it. The paper had been off before, but the words had been covered up again. He was not entitled to use the words "Dispensing chemist." Walter John Drinkwater, of Bidford, deposed that he had seen the sign outside defen-

dant's premises with paper covering the words "Dispensing chemist." The magistrates dismissed the case.

At Margate, on September 1, L. R. Cooper, chemist and druggist, Marine Terrace, was proceeded against on three summonses under the Pharmacy and Poisons Act, 1933. He pleaded "Guilty" to unlawfully selling a vegetable laxative containing poison, selling the poison not under the supervision of a registered pharmacist, and not labelling the poison with the seller's address. For the Pharmaceutical Society, who prosecuted, Mr. A. C. Castle said there had been many cases of this nature up and down the country during the past fifteen months, and while there had been similar prosecutions in connexion with unqualified persons, he thought this was the first case of its kind in the district where a qualified chemist was involved. The three summonses before the Court were in respect of the sale of a vegetable laxative containing substances listed as poisons, which meant that they could only be sold by a qualified chemist. In this particular case defendant carried on a business at 18 Marine Terrace, Margate, but it appeared that he also had other occupations in London, with the result that he frequently left his wife in charge of the Margate business. The Pharmacy Act specifically laid down that these poisons should be sold only at a registered pharmacist's provided the pharmacist was on the premises at the time or another qualified chemist was in his place. Mrs. Cooper, defendant's wife, was not a qualified chemist, and defendant had been leaving her there to carry on the business as a chemist without any qualified supervision at all. An inspector visited the premises on June 20 and purchased a bottle of vegetable laxative. He was served by Mrs. Cooper, to whom he later disclosed his identity. A fortnight previous to this purchase the inspector visited the premises and warned the person who was at that time in charge of the shop. Defendant admitted that he had other occupations in London, and said that as his business in Margate was purely seasonal he was not so conversant with the Pharmacy Acts as he might otherwise be. He realised he was in the wrong, but the circumstances had been rather awkward. Had he been there on that particular occasion this would never have arisen. The magistrates imposed a fine of 10s. in each case, with three guineas costs.

Topical Reflections

By Xrayser

The Romance

of perfumery is exemplified once again in the delightful note on frangipanni—I favour the two "n's"—by Dr. E. J. Parry on p. 284. Unlike so many perfumes such as millefleurs, ess bouquet, heliotrope, stephanotis, and so forth, it apparently owes its name to a family rather than to a flower or flowers. I wonder if there is any information extant regarding the original formula; the usual textbooks give dozens of such which must produce perfumes widely differing in odour. My first acquaintance with this perfume, which I imagine has little sale to-day, was when I was an apprentice. There were few proprietary perfumes then; it was our custom to pack our own. The bottles used were one ounce, panelled on three sides, the corks were cut into the shape of a wedge with the sharp end uppermost, skin was used for capping. The labels were shield-shaped and the name of the perfume was printed across in white on a gold background. Gradually the more delicate flower perfumes disappeared, until to-day there are few left; carnation and violet will probably be the last to go.

The Forecast

by that pharmaceutical orator, S. R. Atkins, reprinted from THE CHEMIST AND DRUGGIST, September 3, 1887, (p. 290), will be read with mixed feelings by many pharmacists

to-day. "The old easy-going times have passed; we have entered on a new, if not better, order of things; let us hope that the survival of the fittest may be the result." The speaker goes on to say that pharmacy, in all probability, will be developed on the scientific and professional side. "Our hope lies in cultivating the scientific rather than there merely trading side of pharmacy, for in this direction . . . competition will be less acute and remuneration for services rendered on a higher scale." Such an outlook was probably justified when Mr. Atkins spoke at the opening session of the British Pharmaceutical Conference in 1887; unfortunately the high hopes expressed have not been fulfilled. The trading side of pharmacy has been developed at the expense of the scientific, and this because only by trading and becoming more and more a trader can the pharmacist hope to earn a modest competence. The speaker could not visualise twenty-five years ahead when National Health Insurance dispensing was to come into prominence, to bring about for pharmacy and for those who practised it a new heaven and a new earth—so we were told. But for the trading side of the calling the scientific would not be possible to-day; I have said in this column before that there is not room for more than one pharmacist practising ethical pharmacy in any fairly large district. Unfortunately competition is so acute for services rendered that some agreement should be arrived at among pharmacists for minimum fees for dispensing.

Company News

P.C. means Private Company and R.O. Registered Office

L. J. HESSIAN, LTD. (P.C.).—Capital £1,750. Objects: To acquire the business of retail chemists and druggists carried on by Leo. J. Hessian at 721 Fulham Road, Fulham, S.W.6, as "F. B. Hessian."

D. ILTYD REES & Co., LTD. (P.C.).—Capital £2,000. Objects: To carry on the business of analytical, manufacturing, pharmaceutical and general chemists, etc. David J. Davies, The Pharmacy, Cross Hands, Carmarthen, director.

HARPER, JOWERS, LTD. (P.C.).—Registered in Edinburgh.—Capital £100. Objects: To carry on the business of wholesale and retail chemists, druggists and opticians, etc. F. A. Harper, 150 Menock Road, Kings Park, Glasgow, chemist, director.

VERITAS Co. (Far East), LTD. (P.C.).—Capital £1,000. Objects: To carry on the business of agents, merchants, chemists, druggists, etc. Pandely Alexiades, 86 Kaede-cho, Dairen, Sth. Manchuria, director. R.O.: Exchange House, 36-8 Old Change, E.C.4.

ISOLENE, LTD. (P.C.).—Capital £500. Objects: To carry on the business of manufacturers and importers of and dealers in adhesive plasters and tapes and adhesives generally, elastic, rubber and rubber goods generally, etc. Kenneth V. Hill, Kenmar, Ivy Road, Macclesfield, insulating material manufacturer, director.

SAFETY GAS DEVICES, LTD. (P.C.).—Capital £1,000. Objects: To acquire patents and inventions, etc. Mechel Rabinowicz, 2 Muston Road, E.5, and 52 Ludgate Hill, E.C., inventor (Polish), director. R.O.: 68 Finsbury Pavement, E.C.2. (Note: The class of "gas" referred to in the title is not indicated.)

D. C. ROEBUCK, LTD. (P.C.).—Capital £10,000. Objects: To carry on the business of manufacturers of and wholesale and retail dealers in soaps, cleansing powders, chemicals and disinfectants of all kinds, etc. Donald C. Roebuck, 57 Storths Road, Birkby, Huddersfield, director. R.O.: 1 Field Street, Bradford.

CUNNINGHAMS DISPENSING CHEMISTS, LTD. (P.C.).—Capital £5,000. Objects: To acquire the undertaking, property and assets of I. J. Cunningham, carrying on business as Mogg & Cunningham at Twickenham, and to carry on the business of chemists and druggists, etc. The first directors are to be appointed. Solicitors: J. D. Langton & Passmore, 16 Tokenhouse Yard, E.C.2.

W. G. & T. ROBINSON (1937), LTD. (P.C.).—Capital £2,000. Objects: To carry on the business of soap makers, oil refiners, pharmaceutical chemists and druggists, manufacturers of glycerine, manufacturers of and dealers in all kinds of toilet requisites, etc. Wm. G. Robinson, 68 Holyhead Road, Handsworth, Birmingham, soap manufacturer, director. R.O.: 215 Brearley Street, Birmingham.

SCOTTISH RETAIL CHEMISTS, LTD (P.C.).—Registered in Edinburgh. Capital £1,000. Objects: To carry on the business of manufacturing and retail chemists, wholesale and retail druggists, etc. P. J. Fleming and J. Callander, both of 13 Albany Street, Edinburgh, directors.

SCOTTISH ASSOCIATED CHEMISTS, LTD. (P.C.).—Registered in Edinburgh. Capital £1,000. Objects and other particulars similar to "Scottish Retail Chemists, Ltd."

BRITISH THERMOSTAT Co., LTD.—The directors have declared an interim dividend of 6½ per cent., less tax. This compares with 5 per cent. a year ago, which was followed by a final of 12½ per cent.

L. ROSE & Co., LTD.—Interim dividend 25 per cent. declared on the ordinary shares. This is at the same rate as a year ago, but this time is payable on additional 48,750 shares issued in November last.

W. C. FOYLE & SONS, LTD.—At the second annual general meeting the chairman, Mr. William C. Foyle, reported an increase in turnover of £4,158, with trading profit £488 in excess of the figure of the previous year. Owing to the growth of the business an extension of the company's premises was contemplated.

Voluntary Liquidation

G. R. Tharratt, Ltd., 4 Myrtle Street, and 42 Fenwick Street, Liverpool, retail chemists. The statutory meeting of creditors was held recently at Liverpool, when Mr. G. R. Tharratt, a director of the company, occupied the chair. According to the statement of affairs which was presented, the liabilities totalled £1,588 11s. 3d., the assets were estimated to realise £855. From the latter amount had to be deducted £196 14s. 5d. for preferential claims, leaving net assets of £658 5s. 7d. The company, it was reported, was formed in October 1924 to acquire the business of a retail chemist carried on by Mr. G. R. Tharratt at 4 Myrtle Street, Liverpool. The nominal capital was £2,000, and there had been issued 1,162 fully paid up ordinary shares of £1 each and 100 fully paid up 5 per cent. cumulative preference shares of a similar face value. At the time of taking over the business the Myrtle Street shop was stated to have been a fairly good one, the turnover for the first year to 1925 amounting to £4,470, but it had steadily declined and in 1935 was only £1,524. In 1936 the turnover amounted to £1,419. The branch at Fenwick Street was unsuccessful at the outset, but recently some improvement had been experienced, mainly due to a reduction in the rent from £200 to £80 per annum. At the meeting of the shareholders the usual resolution was passed putting the company into voluntary liquidation and Mr. W. G. Lewis was appointed to act as liquidator. After discussing the position the creditors resolved to confirm the appointment of Mr. Lewis as liquidator. A committee was also elected.

Private Arrangements

John George Birtley, 16 High Street East, Wallsend, chemist. The creditors of the above met recently at Newcastle-on-Tyne when it was disclosed that the liabilities amounted to £299 18s. 5d. The assets totalled £288 9s 2d. After allowing £78 4s. 9d. for preferential claims, the net assets were £210 4s. 5d., or a deficiency of £89 14s. Accounts disclosed that during the year to September, 1932, the turnover was £1,181, with a net profit of £9, whilst in the following year there was a loss of £21. In the two succeeding years net losses were sustained of £130 and £16 respectively, the turnover being £1,031 and £1,214. During the year to September, 1936, there was a further loss of £21, the turnover being £1,100. Efforts were being made to dispose of the business as a going concern. The creditors resolved that a deed of assignment should be executed in the favour of Mr. P. Gardner.

Annie Emily Elizabeth Bowen, chemist, trading as Bush's Drug Stores, 37 York Road, Battersea. The creditors herein met recently, when it was reported that the liabilities totalled £467 1s. 1d. In addition the bankers were fully secured creditors for £550, and as security they held a charge on the property at the above address. After allowing £5 for preferential claims the net assets were £252 10s., or a deficiency of £214 11s. 1d. It was stated that the debtor's husband purchased the property in 1935 for £775, together with the business for £200, including stock, etc. An advance of £450 was obtained from the bank, who were given a mortgage on the property, and Mrs. Bowen advanced £700. At that time the turnover averaged £11 a week, but it was gradually increased until it exceeded £20 weekly. The debtor's husband died in January 1936, leaving a will appointing Mrs. Bowen as sole executrix. A manager was engaged to look after the business, but the turnover began to decline, and at the present time averaged about £10 a week. Neither the debtor nor her son had drawn anything from the business. It was stated that one creditor had levied execution. It was resolved that a deed of assignment should be executed to Mr. Parkin S. Booth, of the Association of Manufacturing Chemists, as trustee, conditional upon the execution creditor agreeing to withdraw. It was stated that the business would be continued for a short time with a view to a sale being effected.

Sulphæmoglobinaemia

A MONOGRAPH summarising considerable original research and incorporating a review of relevant literature appeared in a recent issue of "The Lancet" (5947, 432). The authors, H. E. Archer and G. Discombe, begin by pointing out that the condition originally called enterogenous cyanosis, thought to be due to intestinal toxæmia, has been shown to be due to the presence of sulphæmoglobin or methæmoglobin in the blood, and the large majority of cases reported are associated with prolonged or otherwise excessive ingestion of drugs derived from anilin or nitrobenzene, of which the most important are phenacetin, acetanilide, methylacetanilide, the more recently introduced sulphanilamide, and nitrobenzene itself, the last usually being incriminated in cases of shoe-dye poisoning.

The mechanism by which methæmoglobin is produced in these cases is not yet understood, but the process of formation of sulphæmoglobin is quite clear. Hydrogen sulphide is constantly absorbed from the large gut, being formed therein by the action of bacteria on food residues, or as a result of the administration of elementary sulphur, which is known to be absorbed partly as sulphide. This absorbed hydrogen sulphide is, under normal conditions, partly destroyed by the piasua, and partly excreted by the lungs. If a grossly excessive amount of hydrogen sulphide is formed, or if a normal amount of hydrogen sulphide is formed when a catalyst for the combination of hæmoglobin with hydrogen sulphide is present in the blood, some of the sulphide will combine with the hæmoglobin in the erythrocyte; and since this cell, which has a life of several weeks, is not lysed, in course of time a detectable sulphæmoglobinaemia will develop.

It is highly probable that all drugs containing the group $C_6H_5N<$ are capable of causing methæmoglobinaemia and of facilitating the production of sulphæmoglobin. If any new drug containing this group is administered in large doses such complications should be anticipated. In some cases the catalytic action on the hæmoglobin-sulphide reaction may be demonstrated *in vitro*, in other cases this may prove difficult or impossible—for example, when the drug is almost insoluble in water.

Effect of Magnesium Sulphate

The action of magnesium sulphate in accelerating the production of sulphæmoglobinaemia is less easy to understand. The authors think it improbable, for reasons which they give, that the hydrogen sulphide formed after administration of sulphates is derived by reduction of the sulphate. An alternative explanation is possible, and in their opinion more probable. In the gut magnesium sulphate is dissociated into magnesium and sulphate ions; the magnesium usually forms some insoluble compound, while the sulphate ion remains in solution, and only traces are absorbed. The presence of this unabsorbed dissolved material increases the osmotic pressure of the intestinal contents, so that water will pass from the body fluids into the lumen of the gut. Absorption of fluid from the colon will be correspondingly reduced, and the more liquid contents of the colon will form an admirable medium for the growth of bacteria; further, by the action of purges the absorption of food is decreased, and more passes to the colon unabsorbed. Since many bacteria normally present in the colon split cystine to form hydrogen sulphide, an increased production of hydrogen sulphide may reasonably be expected. Any treatment which helps the formation of a liquid stool may be expected to accelerate the formation of sulphæmoglobinaemia. Liquid paraffin, since it acts as a mechanical lubricant, is the only laxative which can be relied on to prevent the formation of scybala without the risk of accelerating the appearance of sulphæmoglobinaemia. If liquid paraffin is insufficient, or if constipation is severe, it may be necessary to use enemata. The authors have designed a *régime* for patients who are treated with sulphanilamide, in the hope of preventing or at least delaying the onset of sulphæmoglobinaemia.

They add that phenacetin is a most useful analgesic drug, but is itself capable of facilitating the formation of sulph- and methæmoglobin. For this reason its use with patients who are receiving sulphanilamide should if possible be avoided. The conclusions drawn in the monograph are exemplified by reports of seventeen cases.

Recent Research

Vitamin C in Human Tissues

EXPERIMENTS by H. ROTTER ("Nature," 3521, 717) indicate that 2-6-dichlorophenolindophenol may be used to test the vitamin C activity of human tissues. By the use of a 1-mil tuberculin syringe it is not difficult to inject into the forearm sufficient normal sterile solution of the dye (1 in 1,000) to produce a bubble about 2 mm. in diameter. It is concluded that a decoloration time of about five minutes denotes saturation of a subject to whom ascorbic acid has been administered. It is considered that the reaction may prove useful for many purposes. A decoloration time of more than ten minutes indicates deficiency of vitamin C, while 5-10 minutes shows normal content.

Destroying "Leather Jackets"

R. B. DAWSON and R. B. FERRO ("Journal of the Board of Greenkeeping Research," 4, 15) have investigated the means of combating the ravages of the larva of the crane-fly, commonly known as "leather jacket." Lead arsenate fulfils the requirements of a material which does not damage or disfigure the turf and is economical in use. Good control was obtained with either powder or colloidal forms of lead arsenate, but to obviate unnecessary expense it is recommended that periodical treatment should be carried out with orthodichlorobenzene to ascertain whether or not the turf is infested with "leather jackets." Treatment consists of applying lead arsenate powder (by hand or mechanical distributor) at the rate of 1 oz. per square yard (or using $1\frac{1}{2}$ oz. per square yard, if worm control is also required). The larva die in the soil, so that the work of application is the only labour involved, and this may be done at any time in autumn, winter or spring. Grazing animals must be kept off the turf until the arsenate has become well washed into the soil.

Eucalyptus Cressifolia Oil

BERRY, Macbeth and Swanson ("Journal of the Chemical Society," 1937, 1443) have studied the seasonal variations of the essential oil of *Eucalyptus cressifolia*. The oils were obtained by monthly distillations of the old leaves, and the young leaves and growing tips, with the object of finding evidence of the synthesis of the components of the oil, and also of ascertaining whether the aldehyde cryptal occurred in the oil at any stage of the plant's growth. They found that the yield of oil from the young leaves increases during the period of active growth, the oil decreasing in specific gravity, and increasing in its laevo-rotation. These changes are correlated with the increase in amount of terpenes present in the oil at this period of growth. No similar marked changes were observed in the oil from the old leaves. The terpenes were found to consist largely of laevo- β -phellandrene. Laevo- α -phellandrene and cymene are also present, the latter decreasing in amount in the winter months. No cryptal was detected during the examination of about fifty samples of the oils. The following are selected as typical examples of the characters of the oils distilled from the young leaves at different periods:—

	January 2, 1933	June 5, 1933	December 4, 1933	February 5, 1934
Percentage yield ...	1.8	1.49	2.24	1.44
Specific gravity ...	0.8944	0.9248	0.8795	0.9183
Rotation ...	-22' 10"	-12' 93"	-31' 27"	-14' 27"
Alcohols, per cent. ...	9.7	11.6	7.8	10.3
Aldehydes, per cent. ...	12.2	21.5	6.8	18.7
Cineol, per cent. ...	39.0	54.4	36.0	49.0
Terpenes, per cent. ...	39.1	12.5	49.4	22.0

Business Changes

THE SCOTTISH CO-OPERATIVE WHOLESALE SOCIETY, LTD., has opened a new drug store at Newmains, Lanarkshire.

A. E. BREAKSPEAR, LTD., chemists, 42 High Street, Maidenhead, are carrying on business at No. 46 during rebuilding.

ASCOTTS PHARMACIES (1933), LTD., have opened a new branch at 3 Bridge House, Kensal Rise, London, N.W.10. Telephone: Willesden 0773.

Structure of Proteins

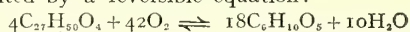
PROFESSOR T. SVEDBERG, of Upsala University, in a Supplement to "Nature" of June 19, deals with the study of high-molecular compounds by means of the ultra-centrifuge. The proteins stand out as a peculiar class, mass analysis by ultra-centrifuge revealing the rather unexpected property of perfect molecular homogeneity. The dependence of molecular weight upon pH value is exemplified by helix hæmocyanin, which at the isoelectric point contains only one component, but dissociates stepwise (from molecular weight of 6,740,000) into halves, eighths and sixteenths with increase in alkalinity, points being reached where a small change in pH causes a great change in molecular state. Reversal of the process reunites the dissociation fragments into the original protein.

High dilution and extremely small amounts of foreign substances may cause dissociation. Thus, 0.001 per cent. of thyroxin gives rise to an appreciable dissociation of thyroglobulin. The action of a dissociating compound is more or less specific, an amino acid acting strongly on a certain protein and having no effect upon another, and vice-versa. High salt concentrations may cause dissociation or association. Thyroglobulin (mol. wt., 640,000) is an example of the latter, the addition of 4-molar sodium chloride giving rise to an association product with a molecular weight of about 16,000,000. The molecules of most proteins seem to be simple multiples of the lowest member of the group, and this remarkable regularity points to a common plan for the building up of the protein molecules, which consists of the successive aggregation of definite units with only a few aggregates stable. The higher the weight, the fewer the possibilities of stable aggregation, and therefore the steps become larger and larger. A table shows 17,600 as a basic constant (as in lactalbumin α), which is doubled in insulin and quadrupled in serum-albumin. The higher multiples are 8, 16, 24, 48, 96, 168, 192 and 384.

Basal Metabolism

THE address of the president of the Physiology Section (Dr. E. P. Poulton) at the Nottingham meeting of the British Association on September 2 states that basal or standard metabolism must be defined afresh as the heat of combustion at rest in the post-absorptive state (and not as total heat measured in a calorimeter, as this may be a little different depending on the respiratory quotient). It follows that the carbon dioxide in the expired air must be measured and no account taken of oxygen intake. The reason is that the oxygen is not entirely used up in combustion but is in part concerned in conversion of carbohydrate into fat or vice versa.

There is a fundamental error in the theory that the respiratory quotient indicates the proportion of carbohydrate and fat that is being burnt in the body under basal conditions. The theory of constant combustion ratio advocated is that carbohydrate and fat are always burnt in the body in fixed proportions. The respiratory quotient, when it is high, measures the amount of conversion of carbohydrate into some less oxygenated material (such as fat), and, if low, measures the reverse change. The conversion of carbohydrate and fat may be represented by a reversible equation:



While carbon dioxide can only result from oxidation, oxygen has a twofold function—oxidation and conversion. It has been calculated that the heat of reaction of the above equation is 2.1 calories per gram of fat. From this it follows that there is an absorption of 3.93 calories of heat for every litre of oxygen given out during conversion of carbohydrate into fat. On plotting the measured heat against the respiratory quotient, this remains about the same, which agrees with fat and carbohydrate being burnt in fixed proportion along well-defined lines of physical and chemical action. Any foodstuff taken in unusual quantity is stored in suitable form though it means a conversion of some kind.

Conversion into fat takes place within the first few hours after ingestion of carbohydrate, and the resulting absorption of heat explains the small specific dynamic action of carbohydrate. After ingestion of fat, the specific dynamic action is also small because the values remain at the basal level with-

out alteration of the respiratory quotient (presumably because fat delays emptying of the stomach). On the other hand—after protein there is eventually increase both in the heat and the respiratory exchange—hence the high specific dynamic action. In the first hour or two there is often a rise of quotient with little increase in heat, which makes it probable that part of the protein is immediately converted into fat and this invalidates the usual method of calculating non-protein metabolism.

There is every probability that carbohydrate is converted into fat in muscular work on a carbohydrate diet. The amount of conversion increases with the muscular work and total respiratory exchanges, which suggests that conversion and combustion are linked reactions. The interesting conclusion is reached that muscular work on any diet produces the same amount of heat, and if heat is absorbed in conversion from carbohydrate to fat this must be provided by increased combustion of the standard carbohydrate-fat mixture.

There are three nutritional periods in post-natal life. During the first the child puts on fat by leading a vegetable existence in the first year and absorbing nutriment without much activity. In the second period (up to six years) with loss of fat the increase in body weight is less and metabolism remains almost stationary. In the third period increase in body weight and metabolism with growth is again established, without increase being as rapid as in the first period, since there is not the same amount of fat deposited.

Early Danish Pharmacy

THE open-air museums of the three Scandinavian countries provide an insight into their culture and customs through the centuries, but there is no historical perspective relating to the healing arts such as is to be found in the German national museums at Munich and at Nürnberg, which contain interiors and exteriors of ancient pharmacies, as well as paintings representing earlier monastic examples. A replica on the actual scale of an *apothek* probably dating from the sixteenth century is, however, to be found in the Tivoli gardens at Copenhagen. This is in "Holberg Byen" (the Holberg Town), an out-door museum. The date of the original of this building is certainly prior to that of the earliest existing concession or State licence to practise pharmacy in Denmark (1549). In old historical papers the first pharmacy in the country is recorded as dating from 1465. Since 1620 all the Danish pharmacies have been operated under the Royal *privilegium*, and in 1842 the right to sell individual businesses was withdrawn, all 336 (sixty-two in Copenhagen) being now a Government monopoly, each with its quota of approximately 10,000 of the population and each paying fees to the State according to the value of the concession and the amount of the turnover. In the ancient business illustrated on the opposite page the Gothic lettering of the sign seems to indicate that the proprietor was German. The earliest apothecaries in Denmark and Sweden were brought in from Germany, sometimes as Royal court pharmacists, the medicinal stores being ultimately moved from the palace to the town to make them available for the general public. It is well known that pharmacy practice in Denmark, Sweden, and Norway and also in Finland, conforms more closely to strictly ethical and purely professional conditions than those of any other part of the continent of Europe. Cosmetic business is left to the more decorative establishments designated *parfumeries*, and photographs to the optical shops. At the period to which the building belongs it was, however, customary for the *apothek* to form part of a larger business dealing with milk, food-stuffs, medicinal herbs, mustard plasters, and the like. The two triangles, in the form of a star surrounding the mortar and pestle, are the symbols of eternity, as medicinal herbs were supposed to be connected with the supernatural. The interior is not fitted out, except for a collection of antique pharmacy jars, many of them very uncommon.—W. M. (3/9).

POGONOTOMY.—"It is said that it was Scipio the younger who introduced shaving as a daily procedure among the Romans. But of course pogonotomy, or shaving, is a much older art. Archaeological excavations have uncovered objects in most ancient civilisations, including Egypt and Babylonia, which to-day are regarded as razors."—L. Hollander and E. J. Casselman in "The Journal of the American Medical Association."



News in Pictures

1. EXECUTIVE COMMITTEE OF THE ULSTER CHEMISTS' ASSOCIATION.

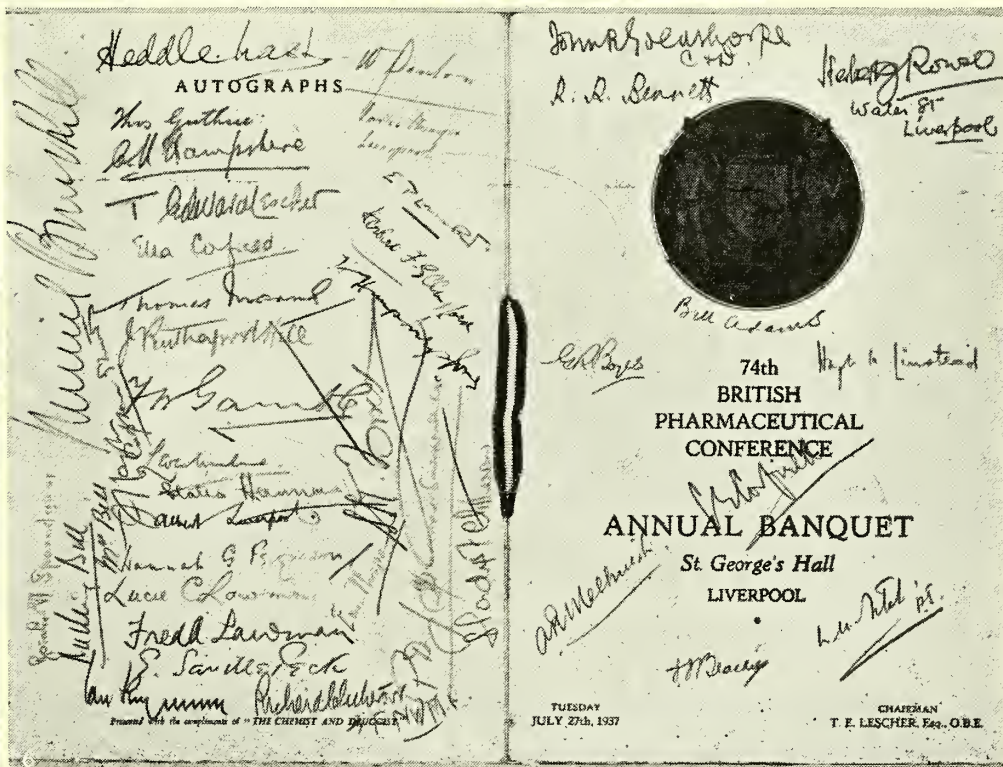
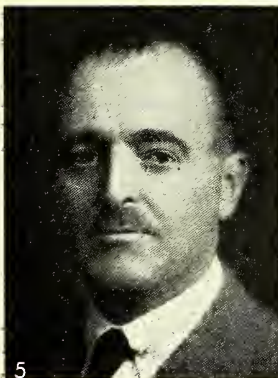
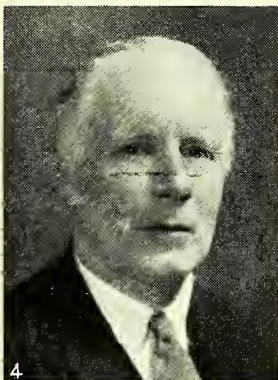
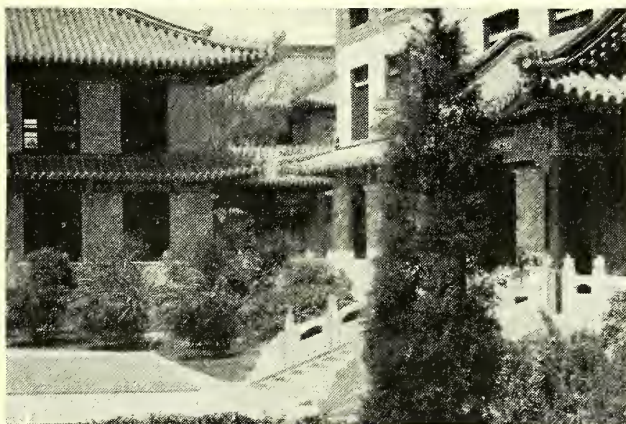
2. MUSEUM PHARMACY. — Reconstructed Danish *Apothek* mentioned in note on opposite page.

3. PEIPING MEDICAL UNION COLLEGE, Peiping (Peking), China.

4. UNIVERSITY APPOINTMENT. — Professor George Barger, M.A., D.Sc., F.R.S. (Hannbury medallist, 1934) appointed Regius Professor of Chemistry, University of Glasgow, as from October 1.

5. MASTER CUTLER ELECT. — Col. F. A. Neill, D.S.O., T.D. (chairman, James Neill & Co. (Sheffield), Ltd.), elected Master Cutler of the Company of Hallamshire in the County of York.

6. FROM LIVERPOOL TO PEIPING. — Much autographed menu of Mr. John Cameron, Ph.C., who visited the British Pharmaceutical Conference, 1937. It now adorns his room at the Peiping Union Medical College, China.



Modern Hair Preparations

HAIR creams are emulsions of mineral or vegetable oils, the type preferred being usually oil-in-water, since such are easily distributed over the hair. The emulsifiers available are many, but in the formulas suggested below only a minimum of technical manipulation is required. In all cases it is well to note that if the homogeniser is to be used then the proportion of emulsifier suggested will be much less than that given in the formula. Cholesterol has frequently been advocated for inclusion in hair creams by virtue of its tonic hair-growing properties and may be incorporated if desired in the proportion of 1-2 per cent. In that case slightly less of the suggested emulsifier may be required.

I				
Liquid paraffin	...	...	...	48
Stearic acid	...	...	...	8
Water	...	...	...	115
Triethanolamine	...	...	...	1.625
Perfume	...	...	...	as required

Heat the liquid paraffin and stearic acid until the latter is melted, but do not allow the temperature to rise above 70° C. Then pour the fats into the water and triethanolamine at the same temperature and stir until thickening occurs. Perfume when nearly cold. It is important not to "whip" this cream, otherwise frothing occurs making it difficult to dispense. In the above formula the emulsifier (triethanolamine stearate) is, of course, formed *in situ*. The cream is easily prepared, stands up well and its viscosity may be varied by the proportion of water present. Glycerin may be added if desired, but in any hair preparation it is advisable to limit the proportion to 5 per cent., otherwise the hair acquires an unwanted stickiness. Diethylene glycol is perhaps better than glycerin as less stickiness is produced.

II

The following formula may be prepared in a manner similar to that described above, the glyceryl monostearate being dissolved in the water.

Glyceryl monostearate	...	...	...	8
Liquid paraffin	...	...	...	20
Water	...	...	...	72
Perfume	...	...	...	as required

Cirolanum 416 is another emulsifier which is easy to use and gives satisfactory products. The addition of a little caustic soda is necessary to form a good emulsion and the method is to add the oils (and fats if any) and the cirolanum to the caustic soda solution, both liquids being at 60°-76° C. Constant stirring is necessary until thickening commences, when the cream may be filled into the final containers.

III

Cirolanum 416	...	...	...	6
Liquid paraffin or white mineral oil	...	...	...	45
Sodium hydroxide	...	...	...	0.25
Water	...	...	...	200
Perfume	...	...	...	as required

The cream will require straining just after preparation while hot. The viscosity may be adjusted by using more or less water than that given in the formula. Just as the trihydric alcohol glycerol forms esters with stearic and other acids, so the dihydric alcohols (the glycols) form similar substances, some of which are of value as emulsifying agents. Diglycol stearate has been introduced for that purpose and in combination with Protegin X has been suggested for use in the preparation of abnormally greasy creams. The following formula is typical for hair cream.

IV

Diglycol stearate	...	...	...	11.6
Liquid paraffin	...	...	...	32.0
Protegin X	...	...	...	4.7
Petroleum jelly (white)	...	...	...	1.65
Water	...	...	...	49.75
Perfume	...	...	...	as required

The emulsifiers and fats are placed in the water and the whole brought to the boil and stirred well until cold.

The following formula is for a solid hair cream which may

be packed in tubes if desired. The method of preparation is the same as given for the first formula.

V

Liquid paraffin	...	...	...	1.000
Soft paraffin (white)	...	...	...	2.75
Stearic acid	...	...	...	0.625
Triethanolamine	...	...	...	0.125
Water	...	...	...	3.500

HAIR FIXATIVES

Under this heading may be included the preparations, with or without oil, of gum tragacanth, karaya gum and two new products, carob gum and tylose. Many formulas have been suggested for fixatives employing the first two gums, so only those containing carob and tylose are given here. The carob gum of commerce is the separated and powdered endosperm of the seeds of *Ceratonia siliqua* (the carob or locust bean tree). Its chief constituents appear to be manan and galactan, together with an enzyme. This gum produces mucilages of approximately the same viscosities as those given by tragacanth in the same concentrations, but is very much cheaper.

VI

P. carob. gum	...	...	...	3
Glycerin	...	...	...	5
Alcohol	...	...	...	2
Water	...	...	...	220
Preservative	...	...	...	as required
Perfume	...	...	...	as required

Suspend the gum in the alcohol and pour into the mixture of glycerin and water and preservative at 80° C. with constant stirring. After formation of the mucilage, heat for about half an hour on a water bath to destroy the enzyme which causes loss of viscosity on standing. When cool add the perfume. Oil may also be incorporated if necessary, although the emulsion will be coarse unless homogenised.

Tylose, obtainable in various grades, is dimethyl-cellulose, and occurs in blocks somewhat resembling asbestos. It is unaffected by light, heat, dilute acids and alkalis, and moulds under average conditions. It is an excellent emulsifying agent and may replace tragacanth in many formulas although the proportion may need adjusting.

VII

Tylose S L 100 (shredded)	...	...	...	2.5
Liquid paraffin	...	...	...	10.0
Glycerin	...	...	...	2.0
Alcohol	...	...	...	5.0
Water	...	...	...	80.5
Perfume	...	...	...	as required

Pour 20 parts of boiling water on to the tylose, stir and stand several hours. Mix the glycerin, alcohol and remainder of the water and add gradually to the tylose paste with constant stirring. Then work in the oil and perfume. Generally no preservative is required for tylose gels.

PRESERVATIVES

It is usually advisable to add to all creams and gels a small proportion of some preservative to guard against fungoid and bacterial growth. Formaldehyde, benzoic acid, salicylic acid and tincture of benzoin have been used, and the latter is frequently an advantageous addition to hair fixatives (gummy) in the proportion of 2 to 5 per cent. The gel or emulsion acquires a much whiter appearance by such an addition. The modern preservatives are the esters of para-hydroxy-benzoic acid (nipagin and nipasol) and the chlor-cresols and chlor-xenols, particularly parachlorometaxylenol, in the proportion of 0.1 to 0.5 per cent. The esters mentioned are commonly used with success in the following proportions—

Creams (5-10 per cent. fat)	—0.12	per cent.	Nipasol M.
" (10-20 " " " "	—0.15	"	"
" (over 20 " " " "	—0.25	"	"
Gum gels	—0.13	"	Nipagin M.

The formulas given may be varied for individual requirements and they should therefore always be regarded as guides rather than as the final product required by the pharmacist.

Effervescent and Foam Baths

EFFERVESCENT baths depend upon the evolution of carbon dioxide from an alkali, such as sodium bicarbonate, and an acid or acid salt. The effervescence gives a sense of warmth to the bather and the baths are generally taken at 30° C. to 35° C. They are usually employed for their medicinal and tonic action and have been recommended for arterial hypertension and neurasthenia. Excellent basic formulas are given in "Pharmaceutical Formulas," Vol. II, and they may be improved by addition of dextrin or gums which retard the evolution of carbon dioxide and thus increase the benefit of the bath. Sodium cholate, in the proportion of 3 to 5 gm. per bath, may also be incorporated with advantage. This substance renders the skin soft and supple and the bubbles of gas smaller, which in itself is eminently desirable. Foam baths, which are next described, may be prepared from an effervescent base which, however, is merely subsidiary to the foam-producing ingredient and serves to disintegrate the powder by the initial effervescence.

FOAM BATHS

These are popular beauty-aids at the present time. They are reputed not only to cleanse but to soften the skin and their use results in gentle massage, which, of course, is beneficial. Many formulas contain an excess of alkali and such may also be labelled "water-softeners," although with many modern foam-producers this is entirely unnecessary. As with ordinary effervescent bath products the addition of dextrin, gums or starch may be desirable and 1.5 per cent. of either sodium cholate or triethanolamine stearate is a useful incorporation. The latter substances have a favourable action upon the "fineness" of the foam bubbles and thus give a more prolonged effect upon the skin. A simple foam bath may be prepared thus:—

Soap flakes	...	...	9 oz.
Sodium cholate	...	...	3 oz.
Hot water (soft)	...	...	2 gallons

The mixture is beaten energetically until the required amount of foam is produced, which should then stand for about an hour. A suitable foam-bath soap may be prepared by the saponification with caustic potash and soda of a mixture of coconut oil fatty acid, palm oil fatty acid and stearin. After drying and shredding a little stearin and sodium bicarbonate, together with substances such as lanette wax, are added and the mixture flaked. The following formulas yield good foam baths, but it should be noted that, if required, the effervescent base may be omitted, although it is useful for breaking the powder when first added to the water.

I			
Sodium bicarbonate (dry)	...	...	120
Tartaric acid (dry)	...	...	70
Borax (dry)	...	...	20
Lauryl sodium sulphate (dry)	...	...	200
Perfume	...	...	as required

About one inch of hot water should be run into the bath and 3 ounces of the above powder added. The water is vigorously agitated to produce the required foam and more hot water run in if required. Too much water should not be added. Further agitation produces copious foam. Lauryl sodium sulphate is the chief ingredient in many soapless shampoos. It is unaffected by hard water, unlike ordinary soap.

II			
Saponin	...	...	20
Starch (dry)	...	...	70
Sodium bicarbonate (dry)	...	...	120
Tartaric acid (dry)	...	...	70
Powd. soap flakes (dry)	...	...	225
Borax (dry)	...	...	90

Six ounces of the powder is mixed with about four pints of hot water and poured quickly into two gallons of hot water in the bath. Agitate violently to produce the required foam and add a little more hot water if necessary, followed by further agitation. Saponin alone, unless present in large amounts, is not found so satisfactory a foam-producer as lauryl sodium sulphate. It has also been suggested by one eminent authority that saponins in foam baths may not be entirely harmless.

OXYGEN BATHS

The supposed action of these baths depends upon the evolution of oxygen by means of a catalyst or alkali in the presence

of organic matter. They are used for their cleansing and tonic action and excellent formulas are given in "Pharmaceutical Formulas," Vol. II. The usual catalyst for the production of oxygen is manganese sulphate, with or without potassium bitartrate, thus—

Sodium perborate	...	...	9 oz.
Manganese sulphate	...	...	90 gr.
Potassium bitartrate	...	...	140 gr.

As described previously, sodium cholate may be added to oxygen bath preparations, but if this is done the ordinary metal catalysts are unsuitable, since they weaken the effect of the sodium cholate. It has been suggested that a suitable catalyst in such cases would be 4 c.c. of liver catalase to each 300 gm. of sodium perborate. Effervescent oxygen bath preparations may be prepared from any standard formula given in "Pharmaceutical Formulas," Vol. II, by the addition of 5 per cent. sodium perborate and a suitable amount of catalyst, organic matter or sodium citrate.

Indian Opium

In an article by Dr. H. B. Dunncliff, chemical adviser to the Indian Board of Revenue ("Nature," 3533, 92) it is pointed out that in 1926 the Government of India discontinued the auctioning of "provision" opium and adopted the policy of sales direct to other Governments only. Supplies to Far Eastern countries were reduced by 10 per cent. annually so as to extinguish such export by December 1935. The financial sacrifice is represented by reduction of revenue from such sales from approximately £750,000 in 1926-27 to nil in 1936-37. The manufacture of standard opium was undertaken at the Ghazipur factory during the Great War to replace Turkish supplies no longer available.

Indian opium contains not less than 8 per cent. of morphine as collected (though from 16 to 20 per cent. has been recorded with latex from first lancements only). Indian opium is still inferior to Turkish opium in morphine content, but it contains more codeine; the percentage content of alkaloids other than morphine is: Narcotine, 5-7; codeine, 1-2; papaverine, 0.4-1.0; thebaine 0.2-0.5; and narceine, 0.5-1.0. Faulty methods of harvesting, lancing and collecting, as well as deterioration on storage, appear responsible for the poorer quality of Indian opium. In Turkey the latex is collected in a moist atmosphere with a falling temperature, whereas the reverse conditions prevail in India, and these are favourable to bacterial deterioration. The consumption of excise opium in India has decreased steadily. The Indian opium factory sales of medicinal opium of standard strength have increased from 511 lb. in 1922 to 1,800 lb. in 1936. During the year ended September 30, 1936, the factory also supplied 1,578 lb. of crude morphine, 130 lb. of morphine hydrochloride, 14 lb. of morphine sulphate, and 284 lb. of codeine.

Trade-Mark Applications

(From "The Trade Marks Journal," August 25, 1937)

- "WOELM"; for medicinal chemicals, excluding bath salts (3). By M. Woelm A.-G., Bahnhof 7, Eschwege, Germany. 576,738.
- "SURFEN"; for medicated quinoline powder (3); preparations for inflammatory infections. By Bayer Products, Ltd., 31 Basinghall Street, London, E.C.2. 577,453.
- "VELVAJEL"; for medicinal chemicals, excluding medicated toilet paper (3). By Parkinsons, Ltd., Curzon Street, Burnley. 577,616.
- "GLANULES"; for medicinal chemicals (3). By Armour & Co., Ltd., St. Martin's-le-Grand, London, E.C.1. 577,982. (Associated.)
- "VELVOX"; "OCULAV"; "AMIKEM"; for voice pastilles and lozenges (3); for medicinal chemicals (3); for perfumery (48). By Dubarry Perfumery Co., Ltd., Goldstone Laboratories, Hove. 578,141/209/577,975.
- "WYNOPLAST"; for all goods (3) and (11). By Amovon, Ltd., Southfield Lane, Bradford. 578,196/197. (Associated.)
- "TAMZAH"; "PREXOLIN"; "SISTRON"; for medicinal chemicals (3). By Anestan, Ltd., 180 Piccadilly, London, W.1. 578/811/812/813.

Trade Notes

DERRIS AND PYRETHRUM PRODUCTS.—Prices and samples of Kontax Pyrethrum-Derris Extract and Novo-Tox insect killer may be obtained from the sole agents: Drake & Dahm, 22 Bartlett's Buildings, London, E.C.4.



UNUSUAL SHOWCARD.—C. R. Harker, Stagg & Morgan, Ltd., Emmott Street, London, E.1, have produced the unusual showcard illustrated on this page to promote the sale of Confidante Cream, which is a three-in-one product. This cream is intended for the removal of superfluous hair. It is described also as a perfumed deodorant and as an ideal powdering base. This preparation is issued in collapsible tubes. The showcard, which has a clock inset, is issued free with quantities not less than three dozen. Full details may be obtained on application.

PHENATE OF SODA MODERNISED.—James Woolley, Sons & Co., Ltd., Victoria Bridge, Manchester, are now packing phenate of soda in a new carton and under the name Phenoda. This product, which has been on the market for fifty years, is issued in two sizes.

NEW PREPARATION OF IRON.—Citrated ferrous chloride, official in the B.P. Addendum, 1936, is issued by Burroughs Wellcome & Co., Snowhill Buildings, London, E.C., as 'Tabloid' Ferrous Chloride, Citrated, gr. 3, in bottles of 100. The product is sugar-coated and is claimed to resist oxidation and deliquescence under all climatic conditions.

PACKED GOODS LIST.—We have received from Ayrton, Saunders & Co., Ltd., 34 Hanover Street, Liverpool, a copy of their illustrated packed goods list, which has just been published. This list consists of 136 pages of Messrs. Ayrton, Saunders' products. It is profusely illustrated and indicates prices and packings.

BOOKS ON DOGS may be obtained from A. F. Sherley & Co., Ltd., 18 Marshalsea Road, London, S.E.1, free. This offer is open until September 30, and is additional to their usual quantity terms of discount for window display bonus. A special folder giving full details of the scheme will be sent to chemists on request.

NIGHT GLOVES FOR LADIES.—Illustrated on this page are Glovlies, medicated night gloves which are issued for preserv-

ing and maintaining the beauty of the hands. Glovlies are made of cellular fabric which permits free access of air, and in addition they are impregnated with a special soothing emulsion which has a beneficial effect on the hands, the action continuing throughout the night. A 1-oz. bottle of remedivating lotion, sufficient for two impregnations, is supplied with every pair of Glovlies, and this lotion is intended



for use only after washing the gloves when they have become soiled. These articles are issued by Medicated Fabrics, Ltd., Regent Arcade, London, W.1.

TOILET ROLLS.—The St. Andrew Mills, Ltd., 34 St Andrew Road, Walthamstow, E.17, supply toilet rolls made from the raw wood pulp in their own mills in London. Wholesale inquiries are invited.

INGRAM'S SHAVING CREAM.—An attractive showcard has been issued as a means of promoting sales of Ingram's shaving cream. The showcard is adapted to carry a tube of the cream. This shaving cream combines its own face lotion, and the effect after use is similar to that produced by an after-shaving application. Further information may be obtained from J. C. Gambles & Co., Ltd., 21 Blackfriars Road, S.E.1, distributors for the makers, the Bristol-Myers Co.



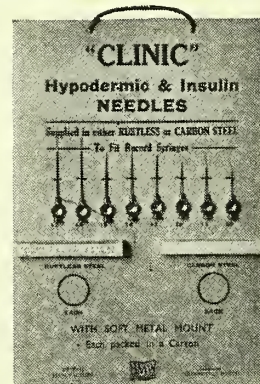
GLASS HOUSE PESTS.—Buggé's Insecticides, Ltd., Sittingbourne, have recently issued a booklet describing glass house pests and fungus disease of particular interest to cultivators of crops under glass. The booklet contains forty pages and gives informative notes on the insects, as well as the products issued by Messrs. Buggé's Insecticides for their removal. Chemists who are interested in the horticultural trade will find this booklet of particular interest.

RAZOR BLADE CONTAINER.—James Neill & Co. (Sheffield), Ltd., Napier Street, Sheffield, have issued an improved design of container for used razor blades, the disposal of which is almost an everyday minor problem. The container measures 2½ by 1½ by 1½ inches and is primarily intended for the Eclipse blades, which are the products of Messrs. Neill.

BRONNLEY'S LIST.—We have received a copy of the new price list issued by H. Bronnley & Co., Ltd., Acton Vale, London, W.3. This list is profusely illustrated in colour and half-tone and gives an excellent representation of the products issued by Messrs. Bronnley. Chemists who wish to have their copies of this list, which will be issued in due course, earlier should make application.

PARFUM RIGAUD.—An advertising campaign will be undertaken in leading women's journals to promote the sales of Parfums Rigaud. Exceptional trade discounts and special display offers are made. A representative will call on request. Supplies may be obtained from the usual wholesalers. Parfums Rigaud is distributed by Phargene, Ltd., 10 Cork Street, London, W.1.

CLINIC HYPODERMIC NEEDLES.—Illustrated on this page is a useful display card of clinic hypodermic needles which has been prepared for the convenience of chemists and their customers. The card carries one each of the principal sizes in demand, and the needles being of rustless metal, they do not become tarnished or rusty. The needles conform to National Health requirements, being made with soft metal mounts, and record fitting. Each needle is enclosed in a transparent sealed carton, a specimen of which is mounted on the card. The needles are British made, and they are obtainable from Britton, Malcolm & Waymark, Ltd., 38 Southwark Bridge Road, London, S.E.1.



INFANT FEEDING.—Allen & Hanburys, Ltd., Bethnal Green, London, E.2, have sent us a copy of their "A Handbook on Infant Feeding" for nurses, which presents a summary of present-day methods of artificial feeding of infants, special reference being made to the Allenbury Progressive System. This booklet contains 32 pages, and chemists may receive a copy on application.

"C. & D." Retail Price List

The important changes in selling prices for September are:—

Cost		Drugs and Chemicals	Selling Price			
d.	per		16 oz. s. d.	4 oz. s. d.	1 oz. s. d.	1 dr. s. d.
96	lb.	Aurantii cortex Ang.	—	3 5	0 11	0 2
22	oz.	Chrysarobinum	—	—	3 3	0 6
42	dr.	Ephedrina alk. P.I. (8)	per	gr.	0 4	6 4
42	dr.	Ephedrina hydrochlor. P.I. (8)	per	gr.	0 3	5 3
36	dr.	Ephedrine sulphas P.I. (8)	per	gr.	0 3	5 3
27	oz.	Ext. ipecacuanhæ liquidum	—	—	4 0	0 7
93	lb.	Hydrargyrum	11 8	3 3	0 10	—
96	lb.	Ol. anisi	—	3 5	0 11	0 2
34	lb.	Pulv. rhei co.	—	1 3	0 4	0 1
168	lb.	Rhei rhiz. "E. I." pulv. elect.	—	6 0	1 9	0 3
54	lb.	Senegæ rad.	—	2 0	0 7	—
66	lb.	Senegæ rad. pulv.	—	2 5	0 8	—
120	lb.	Serpentariæ rhizoma	—	4 3	1 2	—

Cost		Tabellæ	Selling Price (in containers)		
d.	per		100 s. d.	50 s. d.	25 s. d.
117	1,000	Ephedrinæ hydrochloridi gr. $\frac{1}{4}$ P.I. (13)	4 9	—	1 8
198	1,000	Ephedrinæ hydrochloridi gr. $\frac{1}{2}$ P.I. (13)	7 3	—	2 3

Marriages

MARTIN—THOMSON.—In King's College Chapel, Aberdeen, on September 6, Arthur William Martin, M.P.S., to Alice Margaret Thomson.

MORRIS—WETHERALL.—At the Parish Church, Ashton-under-Lyne, on August 31, Robert L. Morris to Dorothy Joan, daughter of Mr. J. F. E. Wetherall, M.P.S., Ashton-under-Lyne.

SAMUELSON—BARKER.—At All Saints' Church, Woodham, on September 2, by the Rev. Canon R. T. Jourdain, Ivor Percy, son of Mr. Percy Samuelson, Esher, to Hazel Colette, second daughter of Mr. A. G. Barker, West Byfleet.

SANDERSON—STONEHOUSE.—At Urmston Baptist Church, Manchester, on September 2, John Robert Sanderson, Ph.C., Upper Newtonards Road, Belfast, eldest son of Mr. John Sanderson, Ph.C., and Margaret Sanderson, R.D., to Muriel Dyson Stonehouse, Urmston.

YACOMINI—MACNAB.—At Comrie, Perthshire, on September 1, William Jolly Yacomini, M.P.S., to Christina B. S. MacNab.

Deaths

DENNIS.—At Paignton, recently, Mr. Ernest Edwin Gascoigne Dennis, M.P.S., aged sixty-five. Mr. Dennis was in business in Northampton, where he was succeeded by his son, Mr. J. A. G. Dennis, M.P.S., and since his retirement has resided at Paignton. The funeral took place at Downham Market.

DUNPHY.—At the Medical Hall, Bantry, co. Cork, on September 1, Mr. William Dunphy, M.P.S.I. Mr. Dunphy qualified in 1905.

FIELDING.—At Minehead, on August 28, Mr. William Robert Fielding, Ph.C., 29 Queens Road, King Cross, Halifax, aged sixty-six. Mr. Fielding had carried on business in Halifax for about forty years. He held office for a year as president of the Halifax and District Chemists' Association, and of late had been treasurer of the Association. He also served on

the Pharmaceutical Committee for the area. Mr. Fielding leaves a widow and two daughters, one of whom is also a pharmacist. The funeral took place at King Cross Wesleyan Church, Halifax, on September 2. Among those present were Messrs. J. Patchett, Gibson Dixon, L. Chambers, P. W. Swire, J. E. Wormald, O. Crook, W. L. Kemp, J. Allen, W. R. Roberts, J. Fletcher (Halifax Insurance Committee) and J. Cundall.

GRIFFITHS.—On August 28, Mr. Edwin Griffiths, Ph.C., Moreton, Wirral, Cheshire, aged fifty-eight.

LEWIS.—At Gloucester, recently, Mr. Lewis David Lewis, chemist and druggist, aged forty-one.

SMITH.—Recently, Mr. William Smith, chemist and druggist, 17 Station Road, Wealdstone, aged forty-three.

TILSON.—At Shrewsbury, on August 28, Miss Annie Elizabeth Tilson, chemist and druggist. Miss Tilson, who was formerly pharmacist at St. Luke's Hospital, Bradford, passed the Minor Examination in 1892 and the Major in the following year.

WOOD.—At 42 High Street, Elie, Fife, on September 4, Mr. George Alexander Smith Wood, M.P.S., aged thirty-six. Mr. Wood became ill while working in his pharmacy and died within a few hours. He acquired his business in Elie about five years ago.

Personalities

MR. E. S. COUTTS, chemist and druggist, managing director of Chemical Interests and associate companies, Auckland, New Zealand, who is in this country on business, may be addressed at the Park Lane Hotel, London, W.1.

MR. THOMAS MARNS, President of the Pharmaceutical Society of Great Britain, sailed from Liverpool for Canada on September 3 in the Canadian Pacific liner "Duchess of Bedford." He expects to be away about six weeks. Among others who bade him *bon voyage* at Liverpool were Mr. H. Humphreys Jones, Mr. J. L. Hirst and Mr. F. A. Lawman.

Recent Wills

MR. THOMAS JAMES WILKES, 5 Institute Road, Swanage, chemist and druggist, who died on February 17 last, aged seventy-one, left estate gross value £2,638, with net personality nil.

MR. HENRY SELBY GREEN, Southbourne, Hants, retired chemist and druggist, who died on May 25 last, aged seventy-five, left estate of the gross value of £1,430, with net personality £1,350.

MR. ARNOLD HAIGH, 238 Huddersfield Road, Halifax, chemist and druggist, who died on June 5 last, aged fifty-one, left estate of the gross value of £4,146, with net personality £4,082.

MR. ANDREW JOHN FREEMAN, 22 The Broadway, Newbury, Berks, chemist and druggist, who died on May 22 last, aged sixty-three, left estate gross value £2,972, with net personality £2,816.

MR. ROBERT READ, Finkle Street, Thorne, near Doncaster, Yorks, chemist and druggist, who died on February 7 last, aged fifty-seven, left estate gross value £4,517, with net personality £1,923.

MR. JAMES RANKIN GARROW, 30 Vineyard Hill Road, Wimbledon Park, London, S.W., technical chemist, who died on June 23 last, left estate gross value £12,558, with net personality £9,813.

MR. ISAAC AMOS JONES, 50 Manville Road, Upper Tooting, S.W.17, chemist and druggist, and formerly of 78 Long Acre, W.C.2, who died on July 28 last, left £9,641, with net personality £9,251.

MR. MATTHEW HENRY GRIFFITH, Granville House, Granville, Avenue, Yeo Vale, Barnstaple, chemist and druggist, who died on December 21 last, aged seventy-four, left estate gross value £1,765, with net personality £1,727.

For
SUNTAN
without
SUNBURN

recommend
LOTIL SUNTAN LOTION

2 ozs. 1/3, 4 ozs. 2/- retail.

JOHN BELL, HILLS & LUCAS LTD.,
Oxford Works, Tower Bridge Road, London, S.E.1

HALIBUT-LIVER OIL
IN BULK

H.R. NAPP LIMITED,
3 & 4, CLEMENTS INN, LONDON, W.C.2.



TRADE MARK PRODUCTS

'MEDINAL'	'VERAMON'
'FOLINERIN'	'FORTAMIN'
'ATOPHAN'	'NEOTROPIN'
'PROGYNON'	'UROSELECTAN B'
'NEUTRALON'	'SOLGANAL'

Schering Products in constant demand

Supplies may be ordered direct and invoiced through your usual Wholesaler

185/192 High
Holborn,
London, W.C.1

Schering
LIMITED

Telegrams—
Scheroph, Phone,
London
Telephone—
Holborn 9345 (5 lines)

FENNINGS' OVER 70 YEARS' REPUTATION
Children's Powders

ADVERTISED EVERYWHERE. READY SALES.
ALFRED FENNINGS, Cowes, I.W.

A WORD OF CAUTION
'LUMINAL'

(Our Registered Trade Mark)

When 'Luminal' is specified on any prescription, the Chemist is legally bound to supply the Original product. Substitutes are liable to give different clinical results from the Original. In order to safeguard doctors and patients we shall protect our Trade Mark rights by vigorous action.



BAYER PRODUCTS LTD.
AFRICA HOUSE, KINGSWAY, LONDON, W.C.2

EXTRA
RECTIFIED

ALCOHOL

Write for Prices

FOR
PERFUMERY

JAS. BURROUGH Ltd. 1 Cale Distillery,
LAMBETH, S.E.11

GARFIELD TEA
FOR CONSTIPATION

Order from your Wholesaler

GARFIELD TEA CO. 44 Foxbourne Road,
BALHAM, LONDON, S.W.17

"Ty.phoo" is the tea which doctors throughout the country are now recommending to patients with whom ordinary tea disagrees.

"Ty.phoo"
TEA IS

"THE BEST PAYING LINE IN THE TRADE"
(20½% on selling price).

Applications invited for sample and terms
Sumner's "Ty.phoo" Tea Ltd., Birmingham.
(Not connected with any other House.)

TRIBASIC PHOSPHATE of SODA
FREE RUNNING WHITE POWDER

Price and sample on application to:

PERRY & HOPE LIMITED
NITSHILL - - GLASGOW

Practical Books for Everyday use

PHARMACEUTICAL FORMULAS (P.F., Vol. I)

The tenth edition of this, the most complete pharmaceutical formulary in the English language, is devoted to the official and semi-official preparations of practically every country in the world. This volume (published 1929) contains 1146 pages. 18/6 post free

PHARMACEUTICAL FORMULAS (P.F., Vol. II)

Published 1934. Supplementary to Vol. I, and known as "The Chemist's Recipe Book." Contains formulas for adhesives, beverages, cleaning materials, culinary and household requisites, horticultural and agricultural preparations, inks, lozenges, perfumes, photographic preparations, polishes, soaps, toilet articles, varnishes, veterinary preparations, etc., including numerous descriptions of practical methods employed in their manufacture, and other information of use to pharmacists and manufacturers. Over 1000 pages. 15/6 post free.

No business library is complete without these two time saving and money making books. Sent by return of post on receipt of remittance to The Publisher

THE CHEMIST & DRUGGIST, 28 Essex St., London, W.C.2

Branch Offices: 4 Cannon St., Manchester 3; 54 Foster's Buildings, High St., Sheffield; 19 Waterloo St., Glasgow; and at (P.F.) Paris, France; Auckland, N.Z.; Melbourne and Sydney, Australia

Information Department

INFORMATION WANTED

Postal or telephone information with respect to makers or first-hand suppliers of the undermentioned articles will be appreciated.

II/98. Bismaso (for indigestion)	C/79. Dr. Plawner's medicated super-soft toilet paper
A/89. Cedrol for moths	H/87. Dr. Thompson's sea-sickness belt
A/69. Narobin powder	

THE CHEMIST AND DRUGGIST

VOL. CXXVII

September 11, 1937

NO. 3005

CONTENTS

	PAGE		PAGE
Basal Metabolism	296	Information Department ...	302
Business Changes	295	Irish Notes	292
C. & D. Retail Price List ...	301	Legal Reports	293
Chemists' Exhibition	305	Marriages	301
Commercial Notes	312	Modern Hair Creams	298
Company News	294	News in Pictures	297
Correspondence:—		News of the Week... ..	291
Letters	313	Personalities	301
Miscellaneous Inquiries ...	314	Pharmacy Act Prosecutions	293
Deaths	301	Recent Research	295
Early Danish Pharmacy ...	296	Recent Wills	301
Editorial Articles:—		Retrospect	314
Poisons Trade	303	Scottish Notes	292
Cheap Orange Oil	303	Structure of Proteins	296
Health Services in Scot- land	304	Sulphæmoglobinæmia	295
Extraction of Cinchona ...	304	Topical Reflections	293
Foam Baths	299	Trade Marks	299
Indian Opium	299	Trade Notes	300
		Trade Report	308

The Poison Trade

It has been estimated that there are over 40,000 shops in England and Wales where poisons may be lawfully sold by listed sellers. This is a striking illustration of one of the results of the 1933 Pharmacy and Poisons Act. Since there is so large a number of individuals willing to pay the annual licence for permission to sell poisons, it is obvious that the trade in poisons in common use to-day is a very considerable one indeed, and the question arises as to whether chemists are making a sufficient effort to meet the needs of the community in this respect.

Many chemists can recall how that famous pharmacist, the late Sir William Glyn-Jones, on many occasions with bated breath and dramatic gesture reminded his audience, if they should become restive, that the only privilege they held as pharmacists was to keep open shop for the sale of poisons. The pharmacist now finds himself among a goodly company of others. In fact, at present he is outnumbered four to one, and this proportion during the next decade is almost bound to increase. Pharmacy itself may perhaps be to blame for the present situation; thanks to the attitude of pharmacists of an earlier generation, who fostered the doctrine that the chemist was the guardian of the public and that poisons should not be obtainable except with difficulty. Meanwhile, the use of poisons in industry, for example agriculture and horticulture, had increased, and manufacturers were bound to find outlets for the distribution of their products. The first warning to pharmacy was given in the 1908 Act, when licences were first granted to seedsmen and others, but the trade has now gone far beyond what was visualised at that time, to some extent due, it must be confessed, to chemists not opposing the granting of licences and to some unexplained prejudice of local authorities. Be that as it may, thanks to the 1933 Act, the trade in poisons is more than ever a legalised one, provided certain require-

ments are fulfilled. Now that the question as to when or when not to sell commercial poisons in everyday use has been settled for him, the pharmacist must consider his position as an authorised seller or authorised stockist, for he is not free to sell the poisons restricted to him as a pharmacist. The position in pharmacy to-day is such that either it is impossible to sell such poisons, or there is so much trouble and danger attached to the sale of preparations containing a percentage of a poison that the medicinal poison trade is a fast-diminishing section of the business of a pharmacist. The labelling precautions alone which are prescribed are so alarming to the public that there is a tendency for purchasers to show a preference for non-poisonous medicaments. Finally, the time may arrive when medicinal poisons are sold only if ordered on a prescription. This may be heralded in some quarters as a desideratum of value in guarding the lives of the public. Since those who desire to purchase poisons for felonious purposes can obtain them elsewhere more easily than they can from pharmacists, this aspect of the case may be left without comment.

Cheap Orange Oil

Six years ago no one would have even thought of suggesting that Sicilian sweet orange oil would by this time have become a commodity of no commercial importance in this and many other world markets. Its position, amounting almost to a world monopoly, had never been seriously challenged until 1932, when the first shipments of the African oil were made. Importers and consumers alike were rather sceptical as to the quality of an oil that was offered at such very cheap prices. Some of the oil was in fact not quite up to standard in those early days, but it was already evident that, with an improvement in quality and particularly in packing, and provided the output could be increased substantially, here was an alternative source that might at least become competitive to the Sicilian oil. In 1932 the shipments totalled 77 metric tons and they increased substantially each year, reaching 336 tons during 1936. During the period January-March, 1937, shipments were 118 metric tons, against 107 metric tons in the corresponding period of 1936. There is reason to believe that the shipments for the full year will show a further small increase. The quality of the oil has been improved, packaging is now efficient and consumers are generally agreed that the oil is in most respects satisfactory. During the history of this oil the highest price reached, in the early part of this summer, was only 6s. to 6s. 3d. per lb. duty paid, in drums. Previously it had been very much cheaper, ranging from 2s. 6d. to 4s. 6d. per lb. The lowest shipment prices recorded for good bulk quantities was slightly less than 2s. per lb. c.i.f., but it is rather unlikely that such a low figure will be recorded again. The position to-day in this market can hardly be described as satisfactory. Early in the year the new crop oil was available at attractive prices, but values quickly advanced and reached to 4s. and then up to nearly 5s. per lb. c.i.f. Most of the business, however, was done early in the season at cheaper prices. Throughout the summer spot holders' prices have been from 5s. 6d. to 6s. 2d. per lb. for drums, but latterly weakness has been evident with pressure to make sales before the season ended. While sales are said to have been fairly satisfactory there appears to be a fair quantity of oil still to be cleared and prices are already down to slightly less than 5s. per lb. in drums, with very little

business moving. No doubt consumers are waiting for news of the new crop which will be ready for shipment in January. Reports from the source indicate that, if the demand warrants it, production may show a further increase. This, with the French franc at a substantial discount to the rate ruling last January, suggests that the Guinea oil will maintain its premier position in this market. The sales of Sicilian sweet oil have been quite negligible this year, and business in the Californian oils, according to reports has been fair in the distilled regular quality with practically no shipments of the cold-pressed oil.

Health Services in Scotland

THE Department of Health for Scotland has just issued a "Summary of the Report of the Committee on Scottish Health Services," published in June 1936. The Report itself was a comprehensive survey of the problems of National Health Insurance in Scotland, and the existing services were discussed in relation to the new Health Policy. The extension of medical and allied services to additional members of the community may be accepted as a foregone conclusion, and in this sum-

mary it is noteworthy that the committee recommended that all members of the community, so far as possible, should be able to avail themselves of the services of a general medical practitioner. In the not distant future, dependants of insured persons and others in similar circumstances are almost bound to become linked up with the present National Health Insurance scheme.

In the sub-section "Pharmacy," recommendation is in effect made that the existing arrangements should be applied to the proposed extension to dependants of insured persons and others. The report goes on to state that "For other service, local authorities should be free to make their own arrangements. It would be an advantage, however, if the present insurance machinery for the supply and pricing of drugs were used as widely as possible by local authorities in other fields. The work undertaken by the Department of Health for Scotland to improve prescribing by doctors has fully justified itself and should be continued. . . ."

There has been adequate warning of impending changes, and it is to be hoped that the representatives of pharmacy in England, Scotland and Wales are fully prepared with a substantial argument for gaining improved rates and remuneration for pharmacists.

Extraction of Cinchona

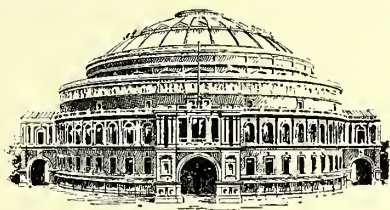
POWERS ("Pharmaceutical Archives," 7.5, 6 and 8.1) has conducted a comparative study of the results obtained from ten series of extractions of a sample of cinchona, each carried out in ten successive stages. His object was to attempt to arrive at an understanding of the mechanism of percolation and to interpret certain anomalies observed and recorded by Wruble ("Journal of the American Pharmaceutical Association," 1933, 22, 641). In each extraction 5½ kilograms of cinchona was divided into ten parts. The first portion weighed 1,000 gm., the second weighed 900 gm., the third weighed 800 gm., and so on down to the tenth, which weighed 100 gm. The 1,000-gm. portion of the drug was moistened with 750 c.c. of 95 per cent. alcohol, and placed in a covered container for six hours. It was then packed in a percolator, alcohol added to saturate, the percolator covered, and the drug allowed to macerate during twenty-four hours. Percolation at a carefully controlled rate was commenced. 100 c.c. of the tincture was reserved for study and 900 c.c. was used for the percolation of the second (900 gm.) portion of cinchona, previously moistened with alcohol. Similarly, a first portion of 900 c.c. of percolate was collected from the second percolator, of which 100 c.c. was reserved, and 800 c.c. was used for the percolation of 800 gm. of alcohol saturated drug contained in a third percolator. This procedure was carried out successively with the other portions of the drug, in such a way that from the tenth and final percolator, containing 100 gm. of drug, only 100 c.c. of percolate was collected in each series. Thus, from 5.5 kilograms of drug a total of ten litres of tincture was collected in 100-c.c. portions.

Tabulated Results

The hundred samples of tinctures collected were subjected to examination—specific gravity, extractive and alkaloidal content being determined. The results were tabulated; they showed a surprising degree of agreement with the results obtained by Wruble from a totally different sample of cinchona and seem to indicate that, so far as cinchona is concerned, a percolate in passing through a column of drug fluctuates in strength. This, of course, is contrary to the general assumption that during a percolation the percolate becomes more and more concentrated as the menstruum passes through a drug and that the finished product becomes progressively weaker with continued percolation. The anomaly was again noticed that in every series of percolations a maximum point was reached, followed by a decrease. The writer observes that it might have been expected that the

alcoholic tinctures prepared from a drug containing a relatively high percentage (9.13 per cent.) of total alkaloids would have shown a much higher alkaloidal content than those prepared from a drug containing a lower proportion (only 4.43 per cent.). It was shown, however, that while the ratio of alkaloidal content of the two drugs was approximately 1:2, the ratio of the average alkaloidal content of the corresponding tinctures was 75:125. It was also determined that alcohol extracted 25.85 per cent. of the total alkaloids from the drug having the lower alkaloidal content, and 20.74 per cent. from the drug containing the higher percentage of alkaloids. The slight solubility of the cinchotannates of the alkaloids in alcohol is given as a probable explanation of these results. "It is not possible, however," the author writes, "to find so ready an explanation of the fluctuations in alkaloidal content which were observed at different intervals in the menstruum. The suggestion was made by Wruble that this anomaly was due to surface phenomena such as adsorption and absorption. Cinchona contains, in addition to alkaloids, cinchotannic acid, cinchona red, quinic acid, and possibly uncombined quinic acid, any one of which might, by the formation of insoluble combinations with the alkaloids, contribute to the irregularities observed during the percolation of cinchona. The fats and related constituents should not be ignored in attempting to formulate an explanation. Any explanations that might be offered are still open to proof. However, the results obtained by the treatment of cinchona with calcium hydroxide or milk of lime previous to extraction with alcohol indicate the plausibility of the assumption that the constituents mentioned do influence to a marked extent the efficiency of alcohol as a menstruum for the extraction of the alkaloids of the drug." The results from one typical examination are given below:—

Amount of Drug in gms.	Time of Percolation in hrs.	Specific Gravity	Percentage of extractive	Percentage of alkaloids
1,000	52½	0.8583	9.44	1.76
900	49	0.8598	11.51	2.33
800	42½	0.8549	9.93	2.32
700	36	0.8698	11.18	2.18
600	30½	0.8608	10.15	2.20
500	25	0.8628	10.20	2.12
400	21½	0.8629	10.78	2.16
300	16½	0.8589	10.12	2.02
200	11½	0.8619	10.15	2.04
100	6½	0.8616	10.22	2.03



CHEMISTS' EXHIBITION

THE Chemists' Exhibition for 1937 will be held in the Royal Albert Hall, London, S.W.7, from September 20-24. This is the first occasion on which this exhibition has been held in this spacious edifice. Special features in contemplation are an entertainment by the chairman of the local association members in their own reception room, a showcard gallery presenting modern showcards of the trade, window display competitions, lectures of trade interest, working machinery, etc. For the convenience of intending visitors the following advance summary is provided:—

Aerograph Co., Ltd.

The company is exhibiting a range of DeVilbiss nose and throat sprays, as well as perfume sprays. Several new and improved models have been produced.

Allen & Hanburys, Ltd.

A comprehensive display comprising pharmaceutical specialties, infant and invalid foods, veterinary products, sterilised dressings, etc. Among the many products are Ferrodic, a phosphate of iron in chocolate-flavoured glucose granules, and Calcydic, a calcium preparation containing di-calcium phosphate.

Allwood Bros.

A display of distilled Carnation floral perfume in attractive packings.

Anzora Perfumery Co., Ltd.

Anzora Hair Cream and Anzora Viola since last year's Exhibition have been issued in modern attractive bottles with black bakelite caps and newly-designed labels. Anzora Cream is now highly emulsified, white in colour, and is entirely non-greasy in use. Anzora Viola also undergoes an emulsifying process.

Armstrong Cork Co., Ltd.

Makers of all types of cork products, and specialists in the manufacture of stoppers and corks for chemists and druggists. To meet the demand for screw caps, the standard range of Artmold caps moulded in phenol or urea powders has been introduced.

Beatson, Clark & Co., Ltd.

All classes of dispensing bottles will be shown. To meet the demand for ribbed bottles due to the 1933 Act a series of white, flint, ribbed flats, etc., is introduced. A new screw neck actinic corn solvent bottle is available fitted with moulded cap and moulded dropper rod.

British Alkaloids, Ltd.

A special feature is made of T.C.P. preparations, T.C.P. being an external and internal antiseptic with a wide range of uses. Products incorporating this germicide are T.C.P. hair tonic, toothpaste, medicated soap and colloidal emulsion, etc.

British Cod Liver Oil Producers (Hull), Ltd.

Palatable cod-liver oil under the trade name "Seven Seas." Freshly bottled at the source immediately after refining. The selected high potency oil (in bottles and in capsules) has a content of not less than four times that of the B.P. standard.

Burgoyne, Burbidges & Co., Ltd.

The display includes an exhibit of chemicals manufactured by Messrs. Burgoyne, amongst which are aspirin, bismuth salts. Packed pharmaceuticals, including influenza, cough mixtures, liniments, embrocations for winter trade. Halibut liver oil emulsion with the addition of calcium gluconate is issued under the Halivamin brand.

Cadbury Bros., Ltd.

Free sample cups of the well-known beverage, Bournvita, are offered at the stand so that visitors may be able to taste the flavour themselves.

W. B. Cartwright, Ltd.

Improvements in packing have recently been made in the marketing of Moorland Indigestion tablets. The carton is now sold in moisture-proof wrapper to prevent any risk of deterioration. Penetrol series of preparations for catarrh, influenza, asthma and bronchitis will be displayed. Also Nupines, a quick-selling profitable winter confection.

Cicero S. Clark.

Cachets for use in dry-closing and wet-closing types of cachets are displayed. Demonstrations of filling and closing machines are given.

Cow & Gate, Ltd.

New products are:—Cow & Gate Glucose A.D.—A preparation of pure medicinal dextrose fortified with vitamins A and D from a natural source of calcium glycerophosphate. Calcilac.—A full cream milk food flavoured with chocolate, containing added calcium salts in an easily assimilable form (calcium gluconate).

The County Perfumery Co.

In addition to Brylcreem, the sales which are furthered by advertising expenditure of £50,000 a year, Brylfoam, the new tube shampoo mentioned in last week's *C. & D.*, is displayed. Hiltone Bleach, Nicona Toothpaste and Quickshave will be shown. A new series of No-Name toilet specialties reserved exclusively for chemists is introduced.

Delavelle (G.B.), Ltd.

A new perfume presented in a colour scheme of shell pink, sea green and silver is called Admiration, issued in four sizes. Face powder, vanishing cream and other toilet articles are included in the Blue Orchid series of perfume products.

Fassett & Johnson, Ltd.

A full range of proprietary products for which Fassett & Johnson, Ltd., are agents are shown, including Angiers emulsion, Antikamnia, Butywave, Diamond Dyes, Mennen Talcums and Requisites, Tattoo Lipsticks, etc.

Wm. Gardner & Sons.

Selected specimens of machines of special interest to manufacturing chemists, including combined patent "Rapid" sifting and mixing machines, for mixing all kinds of dry powders. Also machine directly coupled to electric motor; ball mill for grinding drugs, chemicals, etc. Patent quick change fine powder dressing machine; granulating machine for granulating bath crystals, malted food products, rusks, etc.

Genatosan, Ltd.

A complete range of the company's products, including Sanatogen, Genasprin, Formamint, Nasmint (antiseptic snuff), Genozo Toothpaste, Mouthwash Tablets, Cystopurin, Calcium Aspirin and Fissan Brand Products. A wide range of bacteriological products issued by Messrs. Genatosan includes detoxicated vaccines, ordinary (standard) vaccines, Genora Brand Oral Vaccine for Colds and Influenza, Oral Vaccines for Typhoid, etc., Spray Vaccine for local application to the nose and throat, and Antiviruses. The representatives at our stand will gladly supply information regarding trade terms, which are on a generous scale. A booklet giving details of these vaccine products will also be supplied on request. Genora oral vaccine has proved a valuable adjunct in the treatment of respiratory infections.

Robert Gibson & Sons, Ltd.

A new pack consisting of fruit slices which contain real fruit, packed in cellophane, finished off with artificial rose leaves, and enclosed in handsome display outers to hold one dozen. Own line series, for own names pastilles, lozenges, etc. Other well-known lines are Linseed, Liquorice and Chlorodyne Lozenge, Liquorice and Menthol Pellets in sliding unupsettable vest pocket tins. Chocolate worm cakes and barley sugar sticks.

Howards & Sons, Ltd.

Among the newer products by Howards, attention is directed to sodium, calcium and calcium-sodium lactates, the two latter in powder and granular form for the manufacture of tablets. A feature is made of the small counter packages of popular medicaments, including boric acid powder, Epsom salts, etc. A generous bonus offer on Howards' aspirin tablets is made with window display orders.

J. G. Ingram & Son, Ltd.

The Omega hygienic soother; the Maville rubber hot-water bottle is produced in one standard size, colour, quality and price. Each bottle is put up in a cardboard carton. Special display of Ingram's Agrippa Teat, now available in four shapes.

International Foot Appliances, Ltd.

The Omniped Massaging Foot Cushion, designed to relieve the sufferer from strained muscles.

Ernest Jackson & Co., Ltd.

Centurion brand of lozenges, pastilles and tablets. An additional and larger size is now available for the main lines of the series. This size can be imprinted with own name if desired.

Libby, McNeill & Libby, Ltd.

Libby's Homogenized Foods in three Vegetable Combinations:—No. 1, peas, beets and asparagus tips; No. 2, stringless beans, pumpkins and tomatoes; No. 3, carrots, spinach and peas. Homogenized Cereal, Fruit and Soup are three balanced combinations packed in convenient size tins.

Macleans, Ltd.

A new Maclean's product is Lemskin Lemon Hand Jelly, shown together with Lemskin Hand Tablet. A national advertising scheme is projected. Other Maclean products are Fynnon Salt, the popular Maclean Brand Stomach Powder, and the peroxide toothpaste, etc.

F. Maund & E. Berg (Showcases), Ltd.

A range of modern interior fittings for chemists' shops consisting of glass counters, dispensing screens, etc. Plans and drawings for shop fronts are submitted free.

McClure, Young & Co., Ltd.

Christmas novelties, bath salts, perfumes, will be exhibited in addition to Ephedrine Nasal Catarrh Specific and, for the treatment of rheumatism, Pistany Radio-Active Mud will be featured.

Marshall's Malted Milk, Ltd.

Marshall's Malted Milk is a new presentation of an old health-giving beverage but in popular packs and prices. It is packed in tins in three sizes plain or chocolate flavoured. The milk is issued in tablet form.

Meggeson & Co., Ltd.

Meggezones, a new pastille product in an attractive pack. Meg-o-Pines, Bismuth Dyspepsia Tablets, Sore Throat Lozenges in new show outer, Vistic Denture Fixative. A full range of pastilles will be available at the Stand, at a special contract price, during the Exhibition. Lozenges of all kinds and Boiled Sugars.

Papier Poudré, Ltd.

The familiar books of papier poudré have, in addition, other useful products in similar form, namely, rouges leaves, nail polish leaves, soap leaves, and a compact travelling beauty outfit. A series of Sweet Scented lavender sachets is displayed.

Parke, Davis & Co.

Among the more recent introductions are Gluco-Fedrin, an aqueous solution of ephedrine, chloretone and menthol for the nose and throat; Abidon with Vitamin C, capsules containing vitamins A, B, C and D in definite amounts; Tablet Vitamin C, 0.025 gram of ascorbic acid, pure vitamin C, in each; Ventron, a hæmatinic and hæmatopoietic compound including Ventriculin (stomach extract), Naferon (iron and sodium citrate), and vitamin B, in capsules; and Mapharside, an arsenical compound of high spirochæticidal power and low toxicity.

Potter & Moore, Ltd.

The main feature is a range of one hundred assorted Christmas Gift Coffrets unique in value and more than usually effectively presented. New floral series of perfumes, talcum, liquid nail polish and nail polish remover. Garland Perfume and Garland Talcum in coloured glass bottles. Novelty containers Bonzo and the "Daily Mail" Nipper. Men's series in black and gold, including Gentleman's Talc and After Shave Lotion.

Ru-Mari, Ltd.

A full range of Ru-Mari products are displayed, including lotion for arthritic and rheumatic conditions. Vitamin capsules, non-bitter cascara product, and Tyrodone pure oyster concentrate for anæmia and nervous condition.

Scholl Manufacturing Co., Ltd.

A representative range of Dr. Scholl's Aids, Remedies and Corrective Appliances for foot ailments. Special attention will be directed to Zino Pads, Bunion Reducer, Tarso Pads, Foot Powder, Corn and Callous Salve, Iodine Socks, etc.

Scott & Bowne, Ltd.

In addition to their stable product, Scott's Emulsion, Halivite, the biologically standardised halibut liver oil with a balanced vitamin potency is shown in pill and liquid form. Large size bottles for dispensing and family use are issued in addition to the ordinary size. A new homogenised form of extract of malt and cod-liver oil which contains 25 per cent. of specially selected cod-liver oil of high vitamin potency is exhibited. Scott & Bowne agency lines include J. B. Williams Co. brushless shaving preparations, Khasana Blush Cream (which is now obtainable in six shades), Silvrikin hair preparations, Pacquin's Hand Cream, originally introduced for dentists, doctors and nurses, but now recommended for ordinary daily application.

Semprolin Products, Ltd.

Carmex Baby Mixture; Baby Powder and Cream; Rumatone Mixture, Tablets and Embrocation, for use in rheumatism and influenza; Ba-X-Rae, a barium x-ray cream containing 1½ oz. of barium sulphate in one fluid ounce; Karkol, specially treated with ozone, used in prevention of coated tongue and absorption of foul gases in the stomach, etc.

Sharpe & Dohme, Ltd.

The products selected for display include solution S.T. 37, which is a stable, non-toxic, non-irritating germicidal solution, and preparations containing this substance include sucrets and tooth paste; Hexyltan jelly and solution combines hexyl-resorcinol and tannic acid for the treatment of burns. Mulford Biological products are shown in a full range of antitoxins, antibacterial sera, etc.

A. L. Simpkin & Co., Ltd.

Simpkins Glucose Chemists Quality Confections. Glucose and Friars Balsam Tablets, in jars; also in the new pack counter display carton containing forty-eight crystal rolls. Halibut Liver Oil Hexagons, greatly improved in appearance and with increased vitamin content. Fruitilax, the new laxative which does not contain Phenolphthalein; Pine Catarrh in new pack counter display carton. Throat, Chest and Lung Tablets, Sore Throat Tablets, and Stomach Tablets. A special bonus offer is being made to include Friars Balsam, Throat, Chest and Lung Tablets, Stomach Tablets and Halibut Liver Oil Hexagons. Christmas pack of small jars.

T. J. Smith & Nephew, Ltd.

A special display of Elastoplast elastic adhesive bandages and plasters is arranged for. In addition there is a large variety of other surgical requirements. Elastoplast bandages can be applied to any part of the body, and their exceptional elasticity allows perfect freedom of movement.

Souplex, Ltd.

Moulded specialties, razors and blades. Dainty beauty outfits are shown, including Souplex Beauty Compact (intended for lady's handbag), Lady's Nymph Set (a tiny shaving set), a Pack-Away toothbrush and nailbrush compact and other attractive articles. Samples of Souplex and Double Six blades will be distributed free at the stand.

Edward Taylor, Ltd.

Medicated porous plasters. Joy-step foot aids; flexoplast bandages and flexoplast first-aid dressings.

United Glass Bottle Manufacturers.

One of their specialties, the Washed and Sterilised Service of Medical Bottles, ready for use—the standard dispensing bottle—has been further improved. The White Enamelled Aluminium and Moulded Black Korkalite Screw Caps now have the composition cord wads faced with Resistol paper, which prevents the majority of liquids attacking the cork liner. This has also been applied to the new U.G.B. Bow Medical General Pharmacy packaging, and is now available in all sizes. A new series of white flint powder bottles, wide mouth, fitted with Black Korkalite Caps. Blown and Pressed Opal Ware will be on display—the main requirements of Opal Containers used in Great Britain are now manufactured by U.G.B., supplies being previously imported.

Vernon Powell, Ltd.

Goods for the Christmas Trade, including flapjacks, handkerchief puffs, presentation box with swansdown, fur or wool centres. Perfume sprays. Fitted travel cases for both ladies and gentlemen, fitted with toilet articles of superior quality, are being exhibited at moderate prices. Lanco sets, consisting of wash squares, wash gloves and fancy soaps in decorative display boxes. Powder bowls and other Christmas novelties.

Viscose Development Co., Ltd.

Viskaps and Viskrings, made in various grades and colours, and printed. Spontex "Viscose" sponge, a new form of artificial sponge which can be boiled and is impervious to grease. It is made in three sizes. Plastic mouldings of all kinds for the manufacturing chemist and cosmetic trade.

Walden & Co. (Nufix), Ltd.

Products for the hair and skin, including Nufix hair dressing for men. Nuperm Wave Set.—A popular-priced product. Nuperm Violet and Jasmin Oils. Nufoam Soapless Non-alkaline Shampoo. Setting Lotion "Moderne."—An attractive pack at an attractive price. Eau de Cologne and Lavender. Silver Series.—An exclusive inexpensive pack of brilliants in various perfumes and colours. Aerofume.—The well-known disinfectant.

Welten, Ltd.

Perfume sprays, powder sprays, setting lotion sprays, brilliantine sprays and throat and nasal atomisers. They manufacture the entire metal parts of all sprays exhibited at their own works in Birmingham. New series of "Atomist" throat and nasal sprays.

Westminster Laboratories, Ltd.

Brooklax, the popular chocolate laxative will dominate this stand. Glauber's salts tablets present Glauber's salt in a new and pleasant form. Full particulars of their co-operative advertising campaign are available.

R. F. White & Co., Ltd.

A full selection of perfume and fancy soaps for Christmas trade. Special display is made of Silversilk toilet soap.

G. H. Zeal, Ltd.

Clinical thermometers, including the Repello clinical thermometer, which requires no shaking down to reset the mercury column; Zeal's Sentinel, designed especially for home use, bearing the necessary information as to the meaning of the various temperatures; Zeal's ordinary pattern, magnifying and non-magnifying types. In addition, household and industrial thermometers and hydrometers of all kinds.

Zenobia, Ltd.

A range of true flower perfumes will be shown, which includes orange blossom perfume, Old English lavender, and Devon violet perfume. In addition there are Charmol floral perfumes. Christmas coffrets will be featured which when closed have the compact appearance of ordinary boxes, but as soon as the lid is opened the box automatically tilts and remains upright.

FACTORY LIGHTING.—A new edition of "Lighting in Factories and Workshops" (Home Office Pamphlet, No. 7) has recently been published; copies (6d. each) may be obtained from H.M. Stationery Office, Kingsway, London, W.C.2.

REMOVAL OF ADHESIVE TAPE.—"Your recent editorial on methods of removing adhesive plaster from the skin, and rumours of a damage suit for injuries attributed to violent removal, lead us to suggest oil of wintergreen as a simple, painless and highly efficient means. The oil should be applied with a very small cotton swab only to the point of separation of the adhesive from the skin. If it is applied to the external surface of the plaster the fabric will come away, leaving the adhesive material adhering to the epidermis."—Drs. Chevalier Jackson and C. L. Jackson in "The Journal of the American Medical Association."

VARYING CLINICAL RESPONSE TO TREATMENT.—"If a therapeutic method has produced satisfactory results in a dozen cases it seems irrational that the same technique should have an undesirable effect in the next case on which it is tried. It seems probable that the extent of individual variation is consistently under-estimated, because if an individual representing an extreme of variation happens to be encountered in a small group the result is apt to be discounted as an accident. The evidence available suggests, however, that whenever it is possible to measure quantitatively the effects produced by a drug in a large population an orderly distribution of variation in response is revealed. If this is the case, then the laws of probability indicate that if very large populations are studied occasional individuals will show very wide deviations from the mean response."—Dr. A. J. Clark in "The British Medical Journal."

Trade Report

Where possible scales of prices of chemicals are given for bulk down to small quantities. Prices recorded for crude drugs, essential and "fixed oils and coal tar products are for fair sized wholesale quantities. Qualities of chemicals, drugs, essential and fixed oils, etc., vary, and selected brands or grades would be at higher values

28 Essex Street, W.C.2, September 9

BUSINESS has been patchy but, on the whole, fairly satisfactory in volume. Some markets are decidedly flat, while others continue to receive a brisk inquiry. The position of further supplies of natural products obtained from the Far East is becoming acute, and the future outlook for goods that have to come through the Mediterranean may become difficult. The PHARMACEUTICAL CHEMICALS markets have been rather quiet with no changes of importance to record. EPHEDRINE products are again dearer, and it is not easy to find a seller of bulk quantities. It is noted that manufacturers' prices for small packages of most goods have increased of late, due to higher cost of containers and packing materials.

Crude Drugs

A number of products in this section continue to sell well and spot supplies in some instances are running out. CURAÇAO ALOES continue firm, and there are no firm shipment offers, but a high figure is indicated. ARNICA FLOWERS, new crop, have been in demand. Japanese CAMPHOR continues in good demand, and there may be a temporary shortage of spot stocks. Very little business moving in CASCARA SAGRADA. Norwegian COD-LIVER OIL is dearer and firm for shipment. Quotations for new crop Portuguese ERGOT are irregular with very little business moving owing to the uncertain position. All descriptions of HONEY receiving inquiry with the market fully steady. MATTO GROSSO IPECACUANHA, spot and forward, is firmly held at high figures, with supplies very scarce. Japanese MENTHOL has again sold well on spot and the market is fully steady. PEPPERS show a slight loss on the week. PIMENTO is again fractionally dearer. RUBBER shows a good recovery and is now steady. Fair business in SENNA reported. Mexico has ceased to offer SCAMMONY ROOT and there has been good inquiry for goods afloat. Madras finger TURMERIC continues scarce on spot. WAXES are steady and in quiet demand.

Essential Oils

A few products have attracted good inquiry while most items in this market have been in limited demand only. There has been further active inquiry for ANISE (STAR); only odd lots remain on spot at high figures. BERGAMOT is steady on forward quotation. CAJUPUT is maintained at the recent advance. With no shipment offers CASSIA is fully steady on spot. JAVA CITRONELLA is quoted at good figures. Australian EUCALYPTUS meets with a steady sale at recent prices. Algerian and Bourbon GERANIUM seem of no interest. Spot values for HO (SHU) are dearer. One or two shipment offers of new crop LAVENDER have been received. Shipment market for Sicilian hand-pressed LEMON is reported steadier. French Guinea ORANGE shows further weakness on spot, with evidence of pressure to sell; shipment is also easier and of no interest. Japanese PEPPERMINT has sold well on spot and is firm at a further slight advance; the shipment market is fully steady. American PEPPERMINT is quoted unchanged; a crop estimate has been received. The source reports the possibility of dearer prices for new crop WORMSEED.

Exchange Rates on London

THE following is a list of the chief Continental and other exchange rates at the opening on Thursday morning:—

Centre	Quoted	Par	September 2	September 9
Amsterdam ...	Fls. to £	12:107	9:00	8:98
Berlin ...	Mks. to £	20:43	12:35	12:33
Brussels ...	Belgas to £	nominal	29:48	29:32
Copenhagen ...	Kr. to £	18:159	22:40	22:40
Lisbon ...	Esc. to £	110	110½	110½
Madrid ...	Ptas. to £	25:22½	nominal	nominal
Milan ...	Lire to £	92:46	94½	94½
Montreal ...	Dol. to £	4:86½	4:96½	4:95½
New York ...	Dol. to £	nominal	4:96½	4:95½
Oslo ...	Kr. to £	18:159	19:90	19:90
Paris ...	Fr. to £	124:21	132½	133
Prague ...	Kr. to £	164:25	142½	141½
Stockholm ...	Kr. to £	18:150	19:40	19:40
Warsaw ...	Zloty to £	43:38	26½	26½
Zurich ...	Fr. to £	25:2115	21:62	21:55

Bank rate 2 per cent.

Pharmaceutical Chemicals, etc.

REPORTS indicate that business continues on the quiet side. Products affected by the Chinese dispute continue firm at high figures.

ACETANILIDE.—Values unchanged, business quiet: B.P. crystals and powder, 1s. 7½d. to 1s. 10½d. per lb., as to quantity.

AMIDOPYRINE.—Convention prices continue at the recent reduction: two cwt., 8s. 10d.; one cwt., 9s. 1½d.; less than one cwt., from 9s. 5½d. per lb.; powder, 2½d. per lb. extra.

AMMONIUM ICHTHIOSULPHONATE.—Market has been quiet: one cwt., 1s. 6½d., in 14-lb. tins; 1s. 8d., in 1-lb. tins; 1s. 10½d., in 8-oz. tins, and 2s. 1d. per lb., in 4-oz. tins.

ASPIRIN (TABLETS).—The following are agreed wholesale prices for the British makers: Under 5,000, 3s. per 1,000; 5,000, 2s. 11d.; 10,000, 2s. 10d.; 25,000, 2s. 9d.; 50,000, 2s. 8d.; 75,000, 2s. 7d.; 100,000, 2s. 6d.; 250,000, 2s. 5d.; 500,000, 2s. 4d.; 1,000,000, 2s. 3d.; 2,000,000 and over, 2s. 2d. per thousand tablets. A rebate of 1d. per 1,000 is allowed on orders for 10 million tablets taken over a period of 12 months. For small quantities higher prices would be asked by wholesale distributors.

ASPIRIN.—Makers' and dealers' prices are steady, average business reported; home, trade, ten cwt., 2s. 7d.; five cwt., 2s. 8d.; one cwt., 2s. 8½d.; 28 lb., 3s.; 14 lb., 3s. 1½d.; 7 lb., 3s. 2½d.; 4 lb., 3s. 4½d.; 1 lb., 3s. 7d. per lb. Bulk packing free, net, carriage paid. Contracts, over twelve months, minimum one ton; over six months, less than one ton.

BARBITONE.—Convention prices unchanged, market quiet: spot, two cwt., 8s. 9½d.; 56 lb., 8s. 11½d.; small parcels, up to 9s. 2½d. per lb.

BENZOIC ACID (B.P.).—Market steady, business fair: quantities, ex works, 1s. 9½d.; spot parcels, 1s. 10d. to 2s. 3d. per lb., ex store, as to quantity.

BISMUTH SALTS.—Makers' scales of prices continue steady. Carbonate, not less than one cwt., 6s. 6d.; 28 lb., 6s. 9d.; 8 lb., 7s. 3d.; 4 lb., 8s.; less than 4 lb., 8s. 6d. per lb.

BROMIDES.—Makers' scales of prices steady. POTASSIUM, B.P., five cwt., 1s. 8d.; one cwt., 1s. 9d.; 28 lb., 2s. per lb. SODIUM, B.P., five cwt., 1s. 10d.; one cwt., 1s. 11d.; 28 lb., 2s. 2d. per lb. AMMONIUM, B.P., five cwt., 1s. 11d.; one cwt., 2s.; 28 lb., 2s. 3d. per lb., net. Resale clause applies, 28-lb. parcels, and one-cwt. cases free. Smaller quantities than 28 lb. at higher prices. Export quotations are maintained, as follows: POTASSIUM, B.P., five cwt., 1s. 4d.; one cwt., 1s. 4½d. SODIUM, B.P., five cwt., 1s. 5d.; one cwt., 1s. 5½d. AMMONIUM, B.P., five cwt., 1s. 6½d.; one cwt., 1s. 7d. per lb., f.o.b.

BUTYL CHLORAL HYDRATE.—Business has been quiet: spot, 14 lb., 8s.; 7 lb., 8s. 3d.; 1 lb., 8s. 6d. per lb., in 1-lb. bottles.

CAFFEINE.—The scales for Continental material, duty paid, in 5-lb. tins, are as follows:—Pure alkaloid, two cwt., 8s. 10½d.; one cwt., 9s. 0½d.; 56 lb., 9s. 2½d.; less than 56 lb., 9s. 4½d. per lb. Citrate, two cwt., 5s. 11½d.; one cwt., 6s. 0½d.; 56 lb., 6s. 1½d.; less than 56 lb., 6s. 2½d. per lb. Soda sal., two cwt., 6s. 2½d.; one cwt., 6s. 3½d.; 56 lb., 6s. 4½d.; less than 56 lb., 6s. 5½d. per lb. English makers' prices as follows: Pure alkaloid, two cwt., 9s.; one cwt., 9s. 2d.; 56 lb., 9s. 4d.; less than 56 lb., 9s. 6d. per lb. Citrate, two cwt., 5s. 11d.; one cwt., 6s.; 56 lb., 6s. 1d.; less than 56 lb., 6s. 2d. per lb.

CALCIUM LACTATE.—Market steady: one cwt., 1s. 0½d.; 56 lb., 1s. 1½d.; 28 lb., 1s. 2d.; smaller quantities, up to 1s. 6d. per lb.

CHLORAL HYDRATE.—Home makers' scale of prices continues steady: duty-paid crystals, in 14-lb. free containers, five cwt., 3s. 2d.; one cwt., 3s. 3d.; 28 lb., 3s. 4d. per lb.; 28-lb. jars, one penny per lb. extra.

CHLOROFORM.—Makers' prices steady: two cwt., 2s. 5½d. per lb.; one cwt., 2s. 6d.; 56 lb., 2s. 6½d.; less, 2s. 7½d. per lb., in w-quarts of 8-lb. Packed in drums, ½d. per lb. less. Small bottles extra, from 5d. per lb. for ½-lb. bottles to 1d. for 2-lb. bottles. Carriage paid on minimum cwt. lots.

CITRIC ACID (B.P. CRYSTALS).—Market continues steady: British material quoted at 1s. per lb., less 5 per cent. discount, nominal and without engagement. Dealers' prices for imported material are competitive.

CREAM OF TARTAR.—Market continues steady: British material, 99 to 100 per cent., 92s. per cwt., less 2½ per cent. discount. Dealers' prices for foreign material competitive.

EPHEDRINE.—It is now very difficult to find a seller of bulk quantities, and it seems that any material not already in consumers' hands is required to complete outstanding contracts. The few sales reported have been at higher prices. Hydrochloride, 10s. 3d. to 10s. 6d.; alkaloid, 13s. to 13s. 6d. per oz., nominal.

GUAIACOL CARBONATE.—A small business reported with quotations at about 9s. per lb.

HEXAMINE.—Makers' prices for bulk quantities are steady: B.P. powder at about 1s. 2½d.; free-running crystals, from 1s. 3d. to 1s. 6d. per lb., carriage paid, for bulk lots. Dealers quoting free-running crystals, one cwt., 1s. 4½d.; 14 lb., 1s. 8d.; smaller parcels, up to 2s. per lb., carriage paid.

IODIDES.—The agreed scale of prices for iodides, iodine and iodoform, as from August 9, is:—**POTASSIUM, B.P.**—1 cwt., 4s. 6d.; 28 lb., 4s. 9d.; 14 lb., 5s.; 7 lb., 5s. 6d.; 4 lb., 6s.; smaller quantities, 6s. 6d. per lb. **SODIUM, B.P.**, 28 lb., 5s. 9d.; 14 lb., 6s. 1d.; 7 lb., 6s. 7d.; 4 lb., 7s. 3d.; smaller quantities, 8s. 1d. per lb. **IODINE, B.P., RESUBLIMED.**—1 cwt., 5s. 4d.; 28 lb., 5s. 7d.; 14 lb., 5s. 10d.; 7 lb., 6s. 4d.; 4 lb., 7s.; smaller quantities, 7s. 9d. per lb. **IDOFORM, B.P., CRYST., PRECIP. or POWDER.**—28 lb., 8s.; 14 lb., 8s. 4d.; 7 lb., 9s.; 4 lb., 9s. 10d.; smaller quantities, 10s. 8d. per lb. Contracts for one cwt. and upwards (assorted if required) with fall clause, with delivery as required during four months. 28-lb. tins and one-cwt. cases free. All jars and bottles charged, but credited if returned carriage paid, in good condition, within three months. Assorted quantities are charged at the collective total prices. It is a condition of sale that buyers undertake not to resell any quantity of the above products at prices or terms below the scale for any such quantity current at the time the resale is made.

IRON QUININE CITRATE.—Makers' prices are as follows: not less than 100 oz., 10½d., in 4-oz. tins; 10½d., in 25-oz. tins; 11d., in 16-oz. bottles; 11½d., in 1-oz. and 8-oz. bottles; 1s. 0½d., in 1-oz. bottles; less than 100-oz. lots, from 11d. to 1s. 4d. per oz., according to packing and quantity.

MERCURIALS.—Makers' scales of prices for these salts are steady. **CHLORIDE, B.P. (CALOMEL).**—One cwt., 5s. 11d.; less than one cwt., from 6s. per lb.

METHYL SALICYLATE.—A little more inquiry reported: makers' prices continue unchanged: spot, ten cwt., 1s. 1½d.; five cwt., 1s. 2d.; one cwt., 1s. 2½d.; less than one cwt., 1s. 2½d.; small quantities, in bottles, up to 2s. per lb.

METHYL SULPHONAL.—Remains dull, with quotations keen: two cwt., 19s. 3½d.; one cwt., 19s. 9½d.; 56 lb., 20s. 2½d.; small parcels, 20s. 8d. per lb.

PARAFORMALDEHYDE.—Market steady but quiet: 100 per cent. powder, quantities in kegs, 1s. 1d. to 1s. 1½d.; smaller parcels, up to 1s. 4½d. per lb., as to quantity.

PARALDEHYDE.—Quantities in demijohns about 1s. 1d. and smaller lots in winchesters about 1s. 4d. to 1s. 6d. per lb.

PEPSIN.—Prices for the 1/2,500 continue steady, with 50 lb. or less quoted at 10s. per lb. net, ex store.

PHENACETIN.—The home trade price continues unchanged: crystals or powder, bulk quantities, 2s. 6d.; smaller parcels, 2s. 7d. up to 3s. per lb., as to quantity.

PHENAZONE.—The scale of prices for this product continues at the recent reduction: two cwt., 6s. 2½d.; one cwt., 6s. 5d.; less than one cwt., 6s. 8d. per lb. Powder, 2½d. per lb. extra.

PHENAZONE SALICYLATE (SALIPYRIN).—The scale of prices continues at the recent reduction: two cwt., 7s. 7d.; one cwt., 7s. 9½d.; less than one cwt., 7s. 11½d. per lb.

PHENOLPHTHALEIN.—Market steady, business quiet: two cwt., 2s. 9d.; one cwt., 2s. 10d.; 28 lb., 3s.; 14 lb., 3s. 1d.; 7 lb., 3s. 2d.; smaller parcels, up to 3s. 6d. per lb.

PHENYLETHYLBARBITURIC ACID.—Small quantities in bottles are quoted in the region of 23s. per lb., in 2-lb. bottles.

PHOTOGRAPHIC CHEMICALS.—**AMIDOL.**—28 lb., 7s. 6d.; 14 lb., 8s. 3d.; 7 lb., 9s.; under 7 lb., 11s. 9d. per lb., in 1-lb. bottles. **CHLORQUINOL.**—1-lb. bottles, 21s. per lb. **GLYCIN.**—7 lb., 10s. 6d.; 1-lb. bottles, 13s. 6d. per lb. **HYDROQUINONE.**—56 lb., 4s. 10½d.; 28 lb., 5s.; 14 lb., 5s. 3d.; 7 lb., 5s. 6d.; 1-lb. bottles, 6s. 6d. per lb. **METOL.**—28 lb., 9s. 6d.; 14 lb., 9s. 9d.; 7 lb., 10s. 9d.; 3 lb., 11s. 6d.; 1-lb. bottles, 12s. 6d. per lb. **ALUM (PHOTOGRAPHIC QUALITY).**—1 cwt., 21s. per cwt., 28 lb. for 6s. **GOLD CHLORIDE.**—15-grain tubes, 45s. per doz. **MAGNESIUM POWDER.**—10s. per lb. **PARAMIDOPHENOL HYDROCHLOR.**—8s. 6d. per lb. **POTASSIUM FERRICYANIDE.**—14 lb., 2s. 2d.; 7 lb., 2s. 4d.; 1 lb., 2s. 6d. per lb. **POTASSIUM METABISULPHIDE.**—One cwt., 7½d.; 28 lb., 8d.; 14 lb., 9d.; 7 lb., 11d.; 1 lb., 1s. per lb. **PYROGALLIC ACID, CRYST.**, 28 lb., 6s. 9d.; 14 lb., 7s. 6d.; 7 lb., 8s. 3d.; under 7 lb., 8s. 9d. per lb. **SODIUM (CARBONATE RECRYST.)**—5 cwt., 12s. 6d. per cwt., 1 cwt., 15s. 6d. per cwt.; 56 lb. for 11s. 6d.; 28 lb. for 6s. **SODIUM HYPOSULPHITE, CUBES, CRYST.**—5 cwt., 16s. 3d.; 1 cwt., 18s. 6d. per cwt.; 56 lb. for 11s.; 28 lb. for 6s. **SODIUM SULPHIDE (PURE).**—7 lb., 1s. 3d.; 1 lb., 1s. 6d. per lb., bottles and jars charged extra and non-returnable. **SODIUM SULPHITE, RECRYST.**—One cwt., 20s. per cwt.; 56 lb. for 13s. 6d.; 28 lb. for 7s.

POTASSIUM PERMANGANATE (B.P.).—A fair amount of small business reported: spot, bulk quantities, in drums, 8½d. to 9½d.; druggists' parcels, from 10d. to 1s. per lb.

POTASSIUM SULPHOGUAIACOLATE.—Dealers' spot prices continue in the region of 6s. 1½d. to 6s. 3d. per lb., as to quantity.

QUININE SALTS.—Convention prices continue unchanged: sulphate, 2s. 2d.; bisulphate, 2s. 2d.; ethyl carbonate, 2s. 9½d.; salicylate, 2s. 10½d.; hydrochloride, 2s. 8½d.; bihydrochloride, 3s.; hydrobro-

mide, 2s. 8½d.; bihydrobromide, 3s.; valerianate, 3s.; hydrophosphite, 4s.; alkaloid, 3s. 10½d. per oz., carriage paid on bulk quantities; 100-oz. tins free, smaller packages extra.

RESORCIN.—British material only available: crystals, one cwt., 4s. 11d.; 56 lb., 5s.; 28 lb., 5s. 1d.; 14 lb., 5s. 3d.; 7 lb., 5s. 6d.; less than 7 lb., up to 6s. 6d. per lb.

ROCHELLE SALTS.—Makers' prices are steady:—

	Pulv. Sod. Pot. Tart. B.P.	Pulv. Seidlitz	Double Seidlitz
	Per cwt. s. d.	Per cwt. s. d.	Per cwt. s. d.
Under 1 cwt. ...	85 0	68 0	75 6
Under 5 cwt. ...	82 6	66 3	73 1
Over 5 cwt. in one delivery ...	80 0	64 3	71 0

Soda, pot. tart. cryst. at 2s. 6d. per cwt. extra to powder, net, 14 days. Special prices for quantities. Contracts accepted subject to a rise and fall clause.

SACCHARIN.—The Convention price for 550 is 37s. 6d. per lb., duty paid, with rebates for quantities.

SALICYLIC ACID (B.P.).—Makers' prices unchanged, moderate inquiry: five cwt., 1s. 7d.; 1 cwt., 1s. 7½d.; 28 lb., 1s. 10d.; 14 lb., 1s. 11½d.; 7 lb., 2s. 0½d.; 4 lb., 2s. 2½d. per lb.

SALOL.—Business is limited, with quotations keen: crystals in the region of 2s. 6d. to 2s. 10½d. per lb., as to quantity.

SANTONIN.—Values continue steady from £9 to £9 10s. per kilo, as to quantity.

SODIUM BENZOATE (B.P.).—Fair demand continues: bulk quantities, 1s. 6d.; one cwt., 1s. 7d.; smaller parcels, 1s. 7½d. up to 2s. per lb., as to quantity.

SODIUM DIETHYLBARBITURATE.—Quotations are unchanged, prices steady: one cwt., 11s.; 28 lb., 11s. 3d.; 14 lb., 11s. 6d.; 7 lb., 11s. 9d. per lb., with higher prices for smaller quantities.

SODIUM SALICYLATE (B.P.).—Business continues rather quiet: home trade, crystals or powder, five cwt., 1s. 5½d.; one cwt., 1s. 6d.; 28 lb., 1s. 9d.; 14 lb., 1s. 10d.; 7 lb., 2s.; 1 lb., 2s. 3d. per lb.

SULPHONAL.—Dealers' prices unchanged, business quiet: crystals or powder, two cwt., 15s. 5d.; one cwt., 15s. 11d.; 56 lb., 16s. 1d.; smaller parcels, up to 16s. 7½d. per lb.

TARTARIC ACID (B.P. CRYSTALS).—Average business, market steady: British makers quote at 1s. 1½d. per lb., less 5 per cent. discount. Dealers offering foreign materials at competitive prices.

THEOBROMINE.—Prices for Continental, pure, two cwt., 7s. 10d.; one cwt., 8s.; 56 lb., 8s. 2d.; smaller quantities, 8s. 4d. per lb.; sodium salicylate, two cwt., 6s. 3½d.; one cwt., 6s. 4½d.; 56 lb., 6s. 5½d.; smaller quantities, 6s. 6½d. per lb., delivered; five-lb. tins free; smaller packages extra.

THYMOL.—Synthetic, fine white, one cwt., 6s.; 56 lb., 6s. 4d.; 28 lb., 6s. 9d.; less than 28 lb., 7s. 6d. per lb., tins extra; ex ajowan seed, one cwt., 8s. 5d.; 56 lb., 8s. 10½d.; 28 lb., 9s. 5½d.; 14 lb., 10s. 6d. per lb.

VANILLIN.—Convention prices are steady: ex clove oil or guaiacol, five cwt., 12s. 9d.; one cwt., 13s.; 56 lb., 13s. 3d.; less, 13s. 9d. per lb.

Crude Drugs, etc.

AGAR.—Business has been limited on spot with values generally unchanged: spot, Kobe No. 1, 4s.; No. 2, 3s. 8d. to 3s. 9d.; Yokohama No. 1, 3s. 9d. per lb.; shipment, Kobe No. 1, 3s. 6½d.; No. 2, 3s. 4½d.; Yokohama No. 1, 3s. 3d. per lb., c.i.f.

ALKANET ROOT.—Dealers are quoting small spot parcels at about 47s. 6d. per cwt., ex store.

ALOES.—The Curaçao product continues firm and again tending dearer on spot and there have been no recent shipment offers. Cape continues steady and rather quiet: Cape, spot, 63s. to 64s., as to quality; shipment, 62s. 6d. to 63s. per cwt., c.i.f. Curaçao, spot, 115s. for softish coarse; 120s. for blacks up to 140s. for livers; shipment, last offer received was at 120s. per cwt., c.i.f.

ANTIMONY.—Market continues firm: English regulus, £92 10s. to £93s. 10d., ex works; Chinese crude, spot, £45 per ton, ex store; shipment, nominal.

ARNICA FLOWERS.—A very fair business is reported in new crop with spot prices from 1s. 3d. to 1s. 4d. per lb., as to quantity, ex store.

BALSAMS.—Market continues very steady as quoted, moderate business: *Tolu*, 1s. 10½d.; *Canada*, 3s. 6d.; *Copaiba*, 2s. 2d. to 2s. 3d.; *Peru*, 5s. 6d. per lb., spot.

BELLADONNA.—Quotations for shipment come out dearer for new crop; spot is firmer: leaves, up to 57s. 6d.; root, about 47s. 6d. per cwt., if available.

BENZON.—Dealers report market remains rather quiet: Sumatra, seconds, 75s. to 85s. per cwt., as to quantity and seller; Siam, bean and pea, £26; pea, £20; grain, £15 per cwt., ex store.

BUCHU.—Business has been of small account this week, but values are quite steady: rounds, 2s. 2d. to 2s. 3d., as to quality; ovals, which appear to be in limited supply, 1s. 10d. to 2s. per lb. Shipment is held at 2s. per lb., c.i.f., for rounds. Shipments from the Cape during the period January-June 1937 totalled 170,311 lb., valued at £13,046, compared with 153,468 lb. valued at £8,573 in the corresponding period of 1936.

CAMPHOR.—Plenty of spot inquiry with stocks becoming inadequate; values are firm and unchanged as quoted: Japanese manufacturing BB grade, £8 10s. per 100 lb. Japanese, spot, tablets, 2s. 7½d.; powder, 2s. 3½d.; slabs, 2s. 3½d. per lb., ex store; shipment, tablets, 2s. 3½d.; powder, 2s. 1d.; slabs, 2s. 0½d. per lb., c.i.f.; English refined flowers, one cwt., 3s. 1d.; 28 lb., 3s. 2d.; small lots, 3s. 3d. per lb. Transparent tablets, 4 oz., 8 oz., and 16 oz., 3s. 4d.; 1 oz. and 2 oz., 3s. 5d.; ½ oz., ¼ oz. and ⅓ oz., 3s. 6d. per lb.

CANTHARIDES.—Dealers report a quiet demand: Chinese, 2s. 3d. to 2s. 4d. per lb., as to quantity; shipment, September-October, quoted at 1s. 9d. per lb., c.i.f.

CARDAMOMS.—Market has been of small interest; stocks restricted: spot, Aleppy, green, 4s. 6d. Bombay seed, 6s. 6d. Bleached, if available, about 6s. 6d. per lb., ex store.

CASCARA SAGRADA.—Generally quiet conditions in this product, with spot and shipment values steady: shipment, 1937 peel, 46s. per cwt., c.i.f., with spot holders asking 58s. to 60s. per cwt.; 1934 peel, 65s. 6d.; 1935 peel, 67s. 6d. per cwt.

CELERY SEEDS.—Dealers' prices for good bulk quantities are steady in the region of 90s. per cwt.

COLOCYNTH.—Supplies of pulp are being quoted from 1s. 3d. to 1s. 5d. per lb., as to quality and quantity. Business remains quiet.

CHAMOMILES.—New crop Belgian flowers, first whites, are quoted at 160s. per cwt. landed.

CLOVES.—Values are maintained on a quiet market. Zanzibar, spot, 8½d.; shipment, September-October, 7½d. per lb., c.i.f. Madagascar, in bond, 8½d.; shipment, September-October, 7½d.; October-December, 7½d. per lb., c.i.f.

The landings of Zanzibar in London during the week ended September 4 were *nil* and the deliveries 60, leaving a stock of 3,713. From January 1 to date the landings of Zanzibar have been 5,047 and the deliveries 3,040. Landings of Madagascar for the week ended September 4 were *nil*, and the deliveries 28, leaving a stock of 4,278. From January 1 to date the landings of Madagascar have been 5,267 and the deliveries 2,159 packages.

COCOA BUTTER.—Market is steady, fair business. Prime English, 1s. 1d. to 1s. 1½d. per lb. Foreign, 11½d. to 1s. per lb., as to quantity.

COCONUT (DESICCATED).—Values show an improvement, and the market is now fully steady: spot, fine, 23s.; medium, 22s. per cwt.; shipment, halves, September-October, 22s. per cwt., c.i.f.

COD-LIVER OIL.—Bergen reports business continues on a good scale, with stocks well below normal. Exports to September 7 totalled 45,043 barrels, compared with 49,164 at the same date in 1936 and 47,642 barrels in 1935: finest Lofoten steam refined, non-freezing medicinal oil, 105s. to 106s. per barrel, c.i.f. London. Small lots, on spot, about 137s. 6d. per barrel, ex store, duty paid. British finest medicinal oil is quoted at 110s. per barrel, delivered U.K., with rebates for 25, 50 or more barrels.

DERRIS ROOT.—Market continues to disappoint: spot quoted from about 8½d. to 1s. 4d., as to quality; shipment, basis 17 per cent., ether extract, 7½d. per lb., c.i.f.

DIGITALIS LEAVES.—New crop leaves not yet available. Old crop, in small lots, quoted at 90s. per cwt., ex store.

ERGOT.—The uncertain position of new crops is holding up any business that might be moving, and buyers appear to be waiting developments. Offers of new crop Portuguese have ranged from 4s. 10d. up to 5s. 3d. per lb., c.i.f. No news of any Spanish new crop and no offers of Polish or Russian. A few bags of Portuguese on spot may still be available at 6s. per lb. ex store.

GENTIAN.—Spot supplies are better, with good clean root quoted from 47s. 6d. to 48s. 6d. per cwt., ex store, for fair quantities.

GINGER.—Market continues steady, but rather quiet: West African, spot, 57s.; for arrival, 54s. per cwt., c.i.f. Jamaican, spot, bold in barrels, 87s. 6d.; small grinding, in bags, 62s. 6d. per cwt., ex store.

GUM ACACIA.—Market shows no improvement, with spot offers at keen figures: Kordofan cleaned sorts, spot, 54s.; shipment, 52s. per cwt., c.i.f.

HENBANE.—Dealers are offering small parcels on spot at about 75s. per cwt., ex store.

HENNA.—Fair business reported: Egyptian, green leaves, 34s. 6d. to 35s. 6d.; brown, 30s. to 32s. 6d. per cwt., ex store, as to quantity.

HONEY.—Quite a good inquiry continues, with a fair amount of business materialising. Values are fully steady: spot, Jamaican, dark manufacturing, 37s. up to 50s. for pale set. Californian, white clover, 50s., duty paid. Canadian, white set, nominal, at 51s. per cwt., with no supplies available, ex store. No Cuban, Mexican or Haiti.

HYDRASTIS.—Quoted unchanged, business quiet. Spot, 13s. 3d.; shipment, new crop, 12s. 6d. per lb., c.i.f.

IPECACUANHA.—Very firm owing to shortage of supplies of good test root. Matto Grosso, B.P. test, up to 8s. 6d.; shipment, if available, 7s. 9d. per lb., c.i.f.

KOLA NUTS.—Demand is quiet: West Indian, halves, 4½d.; African, 3½d. per lb., ex store.

LIQUORICE ROOT.—Spot supplies of good natural root at 12s. 6d. per cwt. Good decorticated is difficult to locate on spot; medium quantity offering at 37s. 6d. per cwt., ex store.

LOBELIA HERB.—Market is rather steadier, with spot offers of bulk quantities at about 5½d., and small lots, 6d. per lb., ex store.

LYCOPodium.—Small spot business: spot, about 5s. per lb., ex store.

MANNA.—Dealers are quoting small parcels of finest selected at 3s. 6d. per lb., in 1-lb. tins.

MENTHOL.—A good business continues in this article, and spot and near stocks are very restricted. A fair quantity is due to arrive about the end of the month, some of which has already been booked by consumers. K/S brands, spot, 13s. 9d. to 14s.; in bond, 11s. 9d. to 12s. per lb. Japanese shippers quote September-October at 11s. 7½d.; October-November at 11s. 4½d. per lb., c.i.f. The October-December position is at 10s. 4d. per lb., c.i.f. There has been fairly considerable Continental buying on this market.

MERCURY.—Values for Spanish-Italian metal unchanged: London stocks available. Quoted at 67 dollars per bottle, f.o.b. Continent; spot, £13 12s. to £13 12s. 6d. per bottle, ex store.

OPIMUM.—Quiet demand, market steady. Turkish, original cases of 170 lb., 12½-13 per cent., 1s. 1½d.; Persian, 12 per cent., 1s. 1d. per unit, landed and duty paid.

ORANGE PEEL.—Bitter quarters are not available. Thin cut Tripoli remains quoted at 1s. 1d. to 1s. 2d. per lb., ex store.

ORRIS ROOT.—Good bold selected quoted at about 30s. per cwt. Other grades range from 27s. upwards, ex store.

PEPPER.—Market has been dull and is quoted slightly easier on the week. Lampong, in bond, 3½d.; shipment, October-December, 3d.; January-March, 3½d., c.i.f. Tellicherry, spot, 4½d.; shipment, September-November, 37s., c.i.f. Aleppy, spot, 4½d.; shipment, September-November, 37s. per cwt., c.i.f. White Muntok, in bond, 6d.; shipment, October-December, 4½d. per lb., c.i.f. The London Produce Clearing House has issued regulations in connexion with the London Pepper Terminal Market.

PIMENTO.—At the further advance the market is steady, with fair business reported. Spot, 8½d. per lb., ex store; shipment, September, 71s.; September-October, 71s. per cwt., c.i.f.

RHUBARB.—The market is now practically bare of bulk supplies and only odd cases are offering. In Rough Round up to 2s. 5d. per lb. has been paid for all pinky and 2s. 4d. for ordinary quality. Shensi is nominal at 4s. 9d. to 5s. per lb., but holders are not offering. No shipment offers.

RUBBER.—Values show a good recovery on the week. More business moving with market closing steady. Standard ribbed smoked sheet, spot, 9½d.; September, 9½d.; October, 9½d.; November, 9½d.; December, 9½d.; January-March, 9½d.; April-June, 9½d. per lb.

SAFFRON.—The small supplies on spot of genuine Valencia are firmly held at about 75s. per lb., ex store.

SCAMMONY ROOT.—There has been a good business in the London market for any V.C. root afloat and to come forward. The last shipment quotation from Mexico was at 16s. per cwt., c.i.f., basis 17 per cent., but recently there has been no offers and no replies to inquiries for quotations.

SEEDS.—ANISE.—Spot, duty paid, Spanish, 60s.; Bulgarian, 42s. 6d. CANARY.—Market quiet. Prices quoted spot, duty paid. Mazagan, 22s.; Turkish, 21s. 6d.; Plate, 21s.; Spanish, 27s. 6d. to 45s. CARAWAY.—Dutch, 33s.; duty paid, 29s., f.o.b. Holland. CORIANDER.—Market firm. Morocco on spot quoted at 27s. 9d., duty paid. For shipment, 25s. c.i.f. is the latest quotation received from Morocco. CUMIN.—Spot, Malta, 46s., duty free; Morocco, 45s. duty paid and 42s. in bond. FENUGREEK.—Morocco on spot, 14s., duty paid. MUSTARD.—Market firm. English, 25s. to 36s. per cwt., according to quality.

SENFGA.—Business remains rather poor. Spot, 2s. 2d. to 2s. 3d., as to quantity; shipment, new crop, 2s. 0½d. to 2s. 1d. per lb., c.i.f.

SENNA.—The market has been quiet with values unchanged. Tinnevely Leaves.—Arrivals of this season's crop so far to hand are rather disappointing, the colour being inferior to that of last season. Fair green quality is quoted on the spot as follows: bold at 6½d.; No. 1 at 5½d.; No. 2 at 3½d.; No. 3 at 2½d.; No. 4 at 2½d. per lb. Hand-picked Tinnevely pods are available on the spot at 3½d. to 5d. per lb., according to quality. Alexandrian hand-picked pods have been in more demand at rather firmer rates for finest quality, which is now becoming scarce. Spot values are as follows: finest selected at 5s. to 5s. 3d.; No. 1 at 3s. 6d. to 4s.; No. 2 at 2s. 3d. to 2s. 6d.; No. 3 at 1s. 6d. to 2s.; with low grades offering at 1s. to 1s. 3d. per lb., ex wharf, London.

SHELLAC.—At the better values the market is steady, business fair. Spot, standard TN orange, 47s. to 50s.; fine orange, 60s. to

105s.; pure button, 57s. 6d. to 60s. per cwt. For delivery, TN, October, 48s.; December, 48s. 6d. For arrival, TN, September-October, 45s. 6d. per cwt., c.i.f.

SQUILL.—Dealers are quoting new crop at about 25s. to 27s. 6d. per cwt., as to quantity and quality.

TONKA BEANS.—The spot market has been quiet. Fair frosted Para beans, 3s. 2d. to 3s. 4d. per lb., as to quantity; shipment, 2s. 5d. per lb., c.i.f.

TRAGACANTH.—Rather more inquiry for pharmaceutical qualities, with finest druggist grade at £75; No. 1 white, £70 and No. 2, £64 per cwt. Medium and Textile grades are quoted unchanged and in quiet demand.

TURMERIC.—Good Madras finger continues scarce on spot with the value nominally 30s. per cwt. Some slightly wormy Rajapore offering here at about 30s. per cwt., ex store.

WAX.—**BEES'.**—Markets have been rather quiet, values steady. Calcutta, bleached spot, 147s. 6d.; shipment, September-October, 143s.; ordinary quality, spot, 120s.; shipment, September-October, 110s., c.i.f. Abyssinian, 122s. 6d., in bond; shipment, September-October, 116s., c.i.f. Benguella, spot, 122s. 6d.; shipment, September-October, 110s., c.i.f. Conakry, spot, 120s.; shipment, 114s., c.i.f. Dar-es-Salaam, spot, 127s. 6d.; shipment, September-October, 123s. per cwt., c.i.f. **CARNAUBA.**—Business has been quiet. Fatty grey, spot, 172s. 6d.; shipment, afloat 166s., c.i.f.; September-October, 164s.; October-November, 161s. 6d.; November-December, 160s., c.i.f. Chalky grey, spot, 170s.; shipment, new crop, 160s., c.i.f. Primeira, spot, good quality, 220s.; f.a.q., 215s.; shipment, September-October, 200s., c.i.f. Mediana, spot, 210s.; shipment, 198s., c.i.f.

Essential Oils, etc.

A MODERATE volume of business is reported this week, with a few products prominent. **ANISE (STAR)** is very firm and scarce. Sicilian hand-pressed lemon is steadier at the source. French Guinea orange is weakening on spot. Japanese peppermint is firmer and in good demand on spot.

ALMOND.—Values for foreign oil are steady, only small business reported: English-made, cwt. lots, 3s.; smaller parcels, up to 3s. 6d. per lb.; foreign, cwt. lots, 2s. 10d.; smaller parcels, up to 3s. 3d. per lb. French, bitter, 6s. to 6s. 3d. per lb.

ANISE (STAR).—Inquiry continues on a fair scale, with holders of limited stocks very firm in their idea of values, which continue gradually upwards. Odd lots of tins in cases and oil repacked into tins might still be secured at 4s. 6d. per lb., and this figure has been paid, with 4s. 7½d. now quoted. No shipment offers. Inquiry at the source and in France failed to get any offers of Tonquin oil; the source states all supplies cleared to France.

BAY.—Market is steady, but quiet: 49 to 50 per cent., 4s. 7½d. to 4s. 9d.; 59 to 60 per cent., 4s. 9d. to 4s. 10½d. per lb., as to quantity.

BERGAMOT.—Some small business is reported on spot, with prices varying as to quality from about 14s. 9d. to 15s. 9d. per lb.; shipment continues subdued, with quotations from 15s. 4½d. to 15s. 9d. per lb., c.i.f., as to shipper.

BOIS DE ROSE.—Not much demand for the Brazilian oil on spot, but the lowest price for drums noted is 6s. per lb.; smaller packings up to 6s. 6d. per lb., ex store.

CAJUPUT.—This market is fully steady at the recent advances: B.P., 2s. 9d. to 3s. per lb., as to quantity. Shipment steady at 2s. 4d. per lb., c.i.f.

CANANGA.—Business quiet on spot and quotations competitive: quoted from about 6s. to 6s. 4d., as to quantity; shipment, about 5s. 11d. per lb., c.i.f.

CARAWAY.—Values for Dutch oil tend to advance, but no movement has yet been notified: Dutch rectified, 7s. 9d.; crude, 7s. 4d. per lb., landed and duty paid.

CASSIA.—A fair amount of small business on spot, with good quality oil, in leads, fetching 3s. 3d.; smaller quantities up to 3s. 6d. per lb. No shipment offers.

CEDARWOOD.—Only a few small inquiries reported, market unchanged: African, in drums, 1s.; smaller packages, up to 1s. 3d. per lb. American, in drums, 1s.; smaller packages, up to 1s. 3d. per lb.

CINNAMON LEAF.—Market rather quiet, with Ceylon oil on spot quoted from 3s. 7½d. per lb.; shipment, 3s. 1½d. per lb., c.i.f.

CITRONELLA.—The Java market continues firm, largely due, it is reported, to a "short" at the source. The Ceylon oil continues steady and in moderate demand. Ceylon, spot, drums, 1s. 9d.; smaller parcels, up to 2s.; shipment, drums, 1s. 6½d. per lb., c.i.f. Java, spot, drums, 2s. 1d. to 2s. 1½d.; smaller parcels, up to 2s. 6d.; shipment, drums, 1s. 11½d. per lb., c.i.f.

CLOVE.—Market has been of little interest this week. It is reported that all Zanzibar oil for shipment has been sold well ahead. Madagascar, spot, drums, nominal; smaller packings up to 4s. 6d. per lb.; shipment, 3s. 2½d. per lb., c.i.f., was the last quotation. English distilled oil, cwt. lots, 5s. 6d.; smaller parcels, up to 5s. 9d. per lb., c.i.f.

EUCALYPTUS.—This market continues firm, spot and forward. It is difficult to locate supplies on spot of 80 to 85 per cent. oil, Australian, 70 to 75 per cent., 1s. 8½d. reported paid, in drums; 1s. 9½d. in tins;

80 to 85 per cent., 1s. 10½d. per lb., in drums, if available; higher prices for small lots on spot. Shipment, 70 to 75 per cent., 1s. 6d. in drums; 1s. 6½d. in tins; 80 to 85 per cent., 1s. 7½d. per lb., c.i.f., for September-October shipment.

GERANIUM.—This market seems to have been neglected for some time: spot prices vary as to source and quality, and they are on a generally lower level. Bourbon, spot, 15s. 4½d. to 15s. 9d. Algerian, spot, 15s. to 15s. 4½d.

GINGERGRASS.—A shipment offer at the lower figure of 7s. 3d. per lb., c.i.f., is reported.

GRAPE-FRUIT.—Moderate spot business: Florida, 11s. to 12s. per lb.; Californian, 10s. 6d. to 12s. per lb., as to quantity.

HO (SHIU).—It is apparent that spot supplies are very limited; this week it is reported that up to 4s. 3d. has been paid for "improved" quality; a distant shipment offer indicated a price of about 3s. 9d. per lb., c.i.f.

JUNIPER BERRY.—Quoted unchanged, small demand on spot: B.P. quality, 3s. 6d. to 4s. per lb., as to quantity.

LAVENDER.—There has been no general declaration of shippers' prices for new crop, but one or two offers have come to hand which indicate that 38 to 40 per cent. oil ranges from 16s. 3d. to 17s. 9d. per lb., as to shipper. Lavandin is mentioned at about 8s. 6d. per lb., landed.

LEMON.—The source reports that shippers have been buying and on that account the market shows a recovery. The average price quoted is 11s. 3d. per lb., c.i.f. On spot, some small business noted, with prices ranging from 10s. 4½d. to 11s. 9d. per lb., as to quality and seller. Machine-made oil quoted at about 10s., c.i.f. A small parcel of Californian cold-pressed oil is offered here at 8s. 9d. per lb., in cases, ex store.

LEMONGRASS.—Inquiry is lacking for shipment, with the quotation at about 1s. 6½d. per lb., c.i.f. Spot oil is valued from 1s. 8d. to 1s. 10d., as to quantity.

MANDARIN.—Average small spot business: spot, 23s. to 24s. 6d. per lb., as to quality; shipment, 23s. 6d. per lb., c.i.f.

MUSK.—The spot value of Tonquin pods is nominal, with the London market cleared of stocks.

NEROLI.—Dealers report values are steady, with a little inquiry being dealt with. New crop perfumers' quality, 27s. 6d. to 30s. per oz.; other grades range from 18s. to 24s. per oz., ex store.

NUITEMG.—The spot quotations for American oil continue at 5s. 7½d. to 5s. 9d. per lb., as to quantity.

ORANGE.—Conditions in this market are none too healthy. French Guinea oil is freely offered at a further reduction, with very little business being effected. There are sellers of drums who would shade 5s. per lb. for a quantity. Shipment offers are down to 4s. 4½d. per lb., c.i.f., but there is no interest shown. Oil from other sources is meeting with no business of importance. Tanganyika bitter oil, in drums, 8s. per lb., ex store. Californian, small drums, 4s. 2½d.; tins in cases, 4s. 3½d.; single cases, 4s. 6d. per lb., ex store.

PEPPERMINT.—Quite good business on spot, with prices firm at 5s. 1½d. to 5s. 3d., as to brand and seller. Spot stocks are now very limited, but a fair quantity of cases is due by a steamer at the end of this month; for some of these goods 4s. 9d., c.i.f., has been paid. Japanese shippers quote September-October, 4s. 8d., c.i.f., and October-December, 4s. 5d. per lb., c.i.f., with re-sellers at 4s. 3d., c.i.f. The American natural oil is reported fully steady as quoted at 2 dollars 50 cents per lb., c.i.f., in drums, for new crop oil, and some inquiry is being received. An unofficial report estimates the oil crop will total close up to 900,000 lb. The spot market is quoted rather dearer from 9s. 7½d. to 10s. 6d. per lb., as to brand.

PEITGRAIN.—Spot supplies appear to be rather small, and cases are firm from 4s. 3d. to 4s. 6d. per lb.; shipment, steady at 4s. 2d. per lb., c.i.f.

ROSEMARY.—Dealers holding spot supplies of good quality Spanish oil are asking from 3s. 7½d. to 4s. 3d. per lb., as to quantity and quality. There is no news of the prospects of supplies of new crop oil. A shipment of old oil of limited size is reported to be now afloat and destined for this market.

SANDALWOOD.—Genuine East Indian Mysore, in one-case lots on spot, 19s. per lb. Oil described as East Indian is dearer at 17s. 6d. per lb., c.i.f., for bulk quantities. English-made East Indian, 22s. 6d. to 25s. per lb., as to quantity. English-made West Indian, 7s. 3d. per lb. Australian, steady at 5s. 3d. per lb. for 7-lb. tins; one case at 14s. 9d. and five cases at 14s. 6d. per lb.

SASSAFRAS.—Occasional small business reported on spot, with dealers' prices for natural oil ranging from 3s. 7d. to 3s. 9d. per lb., as to quantity.

SPEARMINT.—The lower priced oils appear to be tending slightly dearer, with spot from 8s. 7½d. to 9s. in cases; shipment offers range from 7s. 8d. to 8s. per lb., c.i.f.

SPIKE.—A fair inquiry has been received on spot, and holders of good quality Spanish oil are firm: from 5s. 6d. to 6s. per lb., as to quality. Repeated inquiry has been made as to prospects of any new crop oil, but no reply has been received so far.

WORMSEED.—Market is a shade dearer forward: U.S.P. quality, 11s. 10½d. to 12s., as to quantity; shipment, 11s. 5d. per lb., c.i.f.

Commercial Notes

JAPANESE SYNTHETIC CAMPHOR.—It is reported that the research laboratory of the Japanese Department of Finance has developed a successful process for the production of synthetic camphor. Industrialisation of the process is now under consideration. According to the "Nikkan Kogyo," an industrial newspaper of Osaka, a project is under way for the production of synthetic camphor in "Manchukuo." Negotiations are in progress for the purchase of German patent rights. The project contemplates the sale of synthetic camphor to China.

INDIAN CAMPHOR IMPORTS.—Imports of camphor into British India in the ten-month period April 1, 1936, to January 31, 1937, amounted to 1,642,290 lb. (1,842,689 rupees) compared with 1,916,916 lb. (1,944,929 rupees) in the corresponding period of the previous year. The chief sources were:—

Country	10 Months, April 1-January 31			
	1935-36		1936-37	
	Lb.	Rupees	Lb.	Rupees
Germany ...	692,397	668,281	548,522	599,666
Japan ...	1,096,261	1,170,185	862,212	978,015
Other countries ...	128,348	106,463	231,556	265,008

U.S.A. CAMPHOR IMPORTS.—Arrivals for the period January-June 1934 to 1937 were as follows:—

Jan.-June	Natural		Crude		Synthetic	
	lb.	\$	lb.	\$	lb.	\$
1934 ...	1,405,028	319,180	910,729	352,362	262,221	99,908
1935 ...	896,960	244,415	746,637	290,577	453,212	172,183
1936 ...	1,367,673	367,741	460,103	213,859	980,424	321,992
1937 ...	1,432,275	405,173	657,759	295,720	1,040,565	369,050

CHILE QUILLAIA BARK EXPORTS.—According to an article in the May issue of the "Boletín Municipal de la República," unless vigorous steps are soon taken, Chile's quillaia trees are in danger of extinction, owing to the fact that when gathering the bark, this is stripped not only from the trunk of the tree, but from all branches, with the result that it soon dies. It is estimated that about 250,000 trees are thus being destroyed annually. Total shipments were:—

Year	Kilos	Pesos of 6d.	Year	Kilos	Pesos of 6d.
1931 ...	1,670,513	1,270,804	1934 ...	2,274,669	565,622
1932 ...	2,976,021	714,245	1935 ...	2,382,630	795,846
1933 ...	2,277,167	552,397	1936 ...	2,511,200	887,100

About 50 per cent. of the shipments were destined for Germany. Great Britain, Spain and the United States were other leading purchasers.

U.S.A. GLYCERIN TRADE.—According to "World Trade Notes" of the U.S.A. Department of Commerce, the imports, exports, production and stock of glycerin for the six months (January-June) 1936 and 1937) were as follows:—

	1936 (1st half)		1937 (1st half)*	
	Pounds	Value	Pounds	Value
Imports:—		\$		\$
Crude ...	2,612,607	235,865	10,270,170	1,745,855
Refined ...	82,057	11,188	5,556,607	1,281,955
Exports ...	709,381	106,248	590,894	170,884

Grade	Production† (Pounds)		Factory and warehouse Stocks (Pounds)†	
	1936 (1st half)	1937 (1st half)	June 30, 1936	June 30, 1937
Crude, 80% basis ...	69,936,214	90,714,360	13,390,164	8,932,389
Dynamite grade ...	21,678,511	29,001,818	15,751,258	12,417,271
Chemically pure ...	36,694,267	49,581,378	21,214,854	8,585,487

* Preliminary. † Bureau of the Census.

CURAÇAO ALOES EXPORTS.—Shipments from South Africa during the period January-June 1937 totalled 445,425 lb., valued at £9,631, compared with 205,307 lb., valued £3,931, in the corresponding period of 1936.

JAMAICAN CITRUS OILS EXPORTS.—Only 32 imperial gallons of lime oil, valued at £258, were exported in the first quarter of 1937, of which 26 gallons, valued at £204, went to the United States. The average f.o.b. value showed a marked improvement over that for the preceding quarter. During the quarter under review 2,790 imperial gallons of orange oil, valued at £5,268, were exported; 1,935 gallons, £3,658, went to the United States. The average f.o.b. value was slightly better than for the preceding quarter. The exportation of both lime and orange oils from Jamaica remains largely dependent for a market upon the United States, with a secondary amount of orange oil going to Great Britain and a still smaller quantity to Canada.

INDIAN PERFUMERY IMPORTS.—There has been a decrease in the consumption of imported perfumes in India over the past six years. Before that period the average annual consumption of foreign perfumes was about 12,000 gallons, valued at over Rs. 1,000,000. This decrease is due to the growing domestic manufacture of perfumes and to the heavy increase in import duty on spirit perfumes. Perfumes imported from the United Kingdom are subject to a preferential tariff. The United Kingdom supplies approximately half of India's imports of perfumed spirit, its share during 1935-36 being Rs. 448,749 out of the total imports of Rs. 733,289. France took second place with Rs. 139,812, Germany coming next with Rs. 134,485. Detailed statistics of imports for the 1936-37 fiscal year just concluded are not yet available, but the figures covering total imports from all sources show a decrease from the preceding year to 6,776 gallons, valued at Rs. 692,730.

LAS PALMAS COCHINEAL EXPORTS.—The Las Palmas Agricultural Bureau has published the following statistics of cochineal exports from Las Palmas for the years 1932 to 1936, by metric quintals:—

Destination	Metric Quintals				
	1932	1933	1934	1935	1936
Marseilles ...	1,063.61	1,132.8	1,218.43	1,272.75	1,082.99
Dieppe ...	309.87	147.25	209.16	158.38	204.52
Hamburg ...	270.40	195.12	313.80	291.65	210.52
London ...	124.74	82.48	159.73	158.02	256.52
Liverpool ...	49.60	35.00	26.07	70.07	24.56
Casablanca ...	15.20	41.79	30.29	33.00	54.61
Spain ...	8.80	7.09	15.02	7.61	1.00
North Africa ...	6.00	42.97	55.31	82.86	48.21
Genoa ...	—	3.00	2.00	—	—
Argentina ...	—	12.54	—	—	—
Trieste ...	—	—	—	—	1.00
Other points ...	—	1.00	—	—	—
Total ...	1,848.22	1,687.88	2,042.35	2,074.34	1,883.93

SOUTH AFRICAN MEDICINAL IMPORTS.—The chief sources of supply of medicinal preparations entering the Union of South Africa during 1935 and 1936 were as follows:—

Country	Spirituos		Country	Non-spirituos	
	1936	1935		1936	1935
United Kingdom ...	£ 9,825	£ 9,430	United Kingdom ...	£ 218,579	£ 214,869
United States ...	3,577	3,670	Germany ...	66,860	56,902
Germany ...	1,189	667	United States ...	59,715	53,660
France ...	639	470	France ...	9,723	9,936
Switzerland ...	675	1,043	Others ...	6,605	12,496
Others ...	209	400	Total ...	£ 361,482	£ 347,863
Total ...	£ 16,114	£ 15,680			

AUSTRALIAN VETERINARY BIOLOGICALS.—Practically all the veterinary biologics now used in Australia are produced by the Commonwealth Serum Laboratories. It is stated that these products are satisfactory, since they are produced, as far as possible, from local strains. Prior to the establishment of this laboratory, supplies were practically all obtained from overseas, the United States being the chief source of supply. Imports of veterinary vaccines for the year ended June 30, 1936, amounted to £1,951, all of which came from the United States. It is stated that these imports from the United States consisted almost exclusively of certain lines which have been long and favourably known on this market, and which, therefore, have an established reputation. As the veterinary services of the Commonwealth and State Governments co-operate with the Commonwealth Serum Laboratories, it is reported that the introduction of new lines would be difficult.

Correspondence

Correspondents may adopt an assumed name, but must in all cases furnish their real name and address to the Editor

A Manifesto

SIR,—With due respect to "Votex" (*C. & D.*, September 4, p. 289), I would point out that to do nothing but "see whether their recommendations are effective at the next election" will not help the cause of pharmacy. We must all do our share in ensuring that the recommendations are effective. To sit back and allow the fight to be lost, and then cry, will bring no results. What is required at the present time is a body of pharmacists who are willing to "talk a lot" (sorry, Tees-sider) and work hard on behalf of all pharmacists. Our efforts should not be localised too much. We should consider pharmacy as a whole, and not only as represented by our own local Branch. The chief fault of local Branch organisation is that it tends to forget the other Branches. There is a lack of inter-communication between various Branches, and therefore ignorance of the true value of some of the candidates at the election. It is this weakness which the National Election Council is trying to overcome. Surely such an object should be encouraged, and we should be willing to help in every way possible. Pharmacists should continue to work in their own Branch, but should pool their energies with other Branches. The National Election Council will in time become a better medium for this service provided we are willing to work to that end.—Yours, etc.,

EIRWYN OWEN.

Bangor.

SIR,—Recent correspondence in the *C. & D.* indicates that the practising pharmacist is again acutely in the throes of the "status" complex. Pharmacists at home, that is, in England, seem content to suffer deprivations of many rights, without demur. I often think that with the unity of concerted and sustained effort, much might be accomplished to remedy official indifference and check further inroads on their rights. The victory of orthodoxy over osteopaths shows what the recruiting of resources can effect. I fail, for example, to understand why the attempt is still unmade to negotiate with the British Medical Association to make pharmaceutical dispensing compulsory, that is, pharmaceutical as opposed to medical. No doubt this suggestion, at first, would be rejected. That need not deter those who represent the chemist's interests. Persistence would finally win and the chemist be rewarded. There seems to be a greater effort in progress than heretofore to render the doctor even more a person of exclusiveness, superior to the modest gain of dispensing—something, as it were, of a nature ethereal—appropriate term—as well as superlatively ethical. In the country in which I reside all that is ethical, among both pharmacists and doctors, is practised. Relations between them are good. A high standard prevails. Here, medical dispensing is almost unknown. I, personally, never resort to it, although a qualified chemist. To revert to my previous theme—I feel confident that many members of Parliament would welcome the occasion to introduce a private bill to benefit pharmacy. I know one or two who would do so gladly were the wishes of that body clearly outlined and their desires properly defined.—Yours faithfully,

PHYSICIAN AND PHARMACIST (6/9).

Value of an Average Sale

SIR,—With regard to the takings of small shops (*C. & D.*, September 4, p. 269), I should like to say that my estimate of an average of sixpence per sale was not entirely based on assumption, but on a working knowledge of the smaller type of pharmacy, of which there are so many to-day in suburban districts and the poorer neighbourhoods. I grant that the prices of many specialties of a medicinal type are higher than this figure, but there are many lines sold at lower prices. If one customer buys a 1s. 3d. proprietary and the next two ask for a razor blade and a twopenny box of ointment, thus the average is at once reduced to sixpence, and this example is typical of the general trading. Many of the advertised lines are now put out in sixpenny packs, both medicinal and toilet articles, some in threepenny sizes, the consequence is that these form the bulk of the sales and the larger packs are seldom asked for. In regard to an attempt to sell items of a higher value, I have

made it a rule when asked for a proprietary line to quote the various prices, for instance, 1s. 3d., 3s. and 5s., and in the majority of cases the reply is that it is the sixpenny size which is required. So far has the sixpenny idea taken root that one customer recently refused to take a patent priced at 1s. 3d. because he insisted he could get a sixpenny pack, although I assured him it was not put up in a smaller size.

Yours faithfully,

SALARITE (4/9).

The Branch Manager

SIR,—"Radix" (*C. & D.*, September 4, p. 290) states that one of the principal difficulties encountered in running a branch successfully is to find a suitable manager. One cannot expect a manager to be quite so enthusiastic as a proprietor in the conduct of a business, especially in these days when the old pride of capability in one's work seems to be extinct. Various methods have been adopted to overcome this and to stimulate an interest in the work, such as payment of commission on sales of certain lines, or a percentage of any increase in profits. If the manager is young and capable, and is successful in extending the business, he soon begins to think that he might do better for himself by becoming his own employer, on the other hand, if he is middle aged, and especially if he has not been successful in a venture of his own account, he is not so enthusiastic, and the payment of commission will not be much inducement to him to do more than is necessary to keep the job. I have always been a believer in the idea of working my own shop for all it was worth, because the amount of business done required full time attention, and I could see that a branch would divide my energies between the two and then the original business would be sure to suffer. But if I had opened a branch and had secured a good man as the manager, then I think I should have considered forming a private company and have given him an interest in it, thus securing his services and at the same time giving him a standing equivalent to being his own employer.—Yours faithfully,

EX-MANAGER (5/9).

Looking Back

SIR,—It is interesting to read the forecast of fifty years ago (*C. & D.*, September 4, p. 290) that the future development of pharmacy would be on the scientific and semi-professional side. So far as regards the examination requirements, these now include more scientific subjects, but this has not been reflected in our daily work, which has taken on more than ever the nature of a trade dealing with the sale of packed lines and toilet sundries. In the pharmacy where I served my apprenticeship, forty years ago, we did not have a great deal of dispensing, panel work had not been thought of and there were not many private prescriptions dispensed in the average business of those days, but we did have plenty of experience in making galenicals because as many as possible were made on the premises. After finishing my apprenticeship I had first a period in the West End, and then some time at a health resort where none of the doctors did their own dispensing, so that by the time I entered for the Minor I had acquired a fair general experience of practical work and had little trouble in dispensing the preparations set in practical pharmacy. It is doubtful whether such all-round training can be available to most apprentices to-day, panel dispensing is largely of a stereotyped nature which becomes merely repetition work, and the cost price tariff compels the pharmacist to buy his galenicals in the best market at prices to meet the tariff, and at which it is no longer economical to make them himself. The prescriptions which we now receive from consultants and specialists mostly order proprietary remedies or tablets or capsules which we have to obtain from the wholesaler, so that what we used to call the art of dispensing is rarely called for in these days, and so becomes more difficult to acquire. I can also remember the introduction of roll films and the cheap box form cameras which brought snapshot photography into popular favour. At that time, in the holiday season, I spent many hours in an improvised dark room . . . —Yours faithfully,

SENEK (5/9).

Miscellaneous Inquiries

We do not undertake to analyse and report upon proprietary articles nor to publish supposed formulas for them

F. H. P. (4/82).—SALE OF BRANDY.—For purposes of sale, brandy is included in "spirits," and an Excise licence is required. For sale by retail a justices' licence is also required, except in the case of a spirit dealer who also holds an Excise spirits "off" licence and whose premises are used exclusively for the sale of intoxicating liquors or of intoxicating liquors and mineral waters and which have no internal communication with the premises of a person carrying on any other trade or business. There is a common view that brandy must either be a spirit distilled wholly from wine, or a mixture of such spirit with rectified grape spirit; but in fact there is no statutory standard for the genuineness of brandy. If a person is charged with selling as brandy what is not brandy, the court trying the case must, in the light of the expert evidence before it, fix a standard for itself.

B. & C. (23/84).—INK REMOVER.—The following formula for an ink remover will probably suit your purpose:—

Oxalic acid	..	..	..	..	1 part
Citric acid	..	..	..	..	1 part
Tartaric acid	..	..	..	..	1 part

Dissolve the acids separately in just sufficient water to effect solution and mix.

An extensively used two-solution remover consists of:—

- A.—Solution of chlorinated lime.
B.—Dilute acetic acid.

The stain is first treated with solution A, and when the solution has well soaked in the acetic acid is applied. Afterwards the chemicals are removed by rinsing or applying moist blotting paper. This method is particularly suitable for use with ink stains on paper.

Copying ink is difficult to remove. The stains should be washed well in water and tartaric acid then applied. After several hours the acid should be removed by rinsing with warm water. In some cases it is necessary to complete the treatment with solution of chlorinated soda. Sometimes it is an advantage to treat the moistened stain with methylated spirit and 10 per cent. hydrochloric acid before bleaching by the above method.

H. W. H. (31/87).—CHROMIUM PLATING.—Prepare a solution of chromic acid 250 gm. and sulphuric acid 2.5 gm. to the litre. In the bath insert lead anodes at a temperature of about 45° C. and with cathode current density about 1 ampere per square inch. Under these conditions a bright copper plating is obtained on smooth polished metal surfaces. The temperature of the bath must be maintained, for if it is allowed to drop to 35° C. a dull instead of a bright plating is obtained.

P. J. L. (Estonia) (31/88).—BATH CRYSTALS.—Sodium carbonate crystals are commonly used as bath crystals, suitably coloured and perfumed. The colours generally adopted are aniline dyes, because vegetable colours are usually acted upon by the salts themselves. Naturally the aniline dyes are liable to fade in strong sunlight because a really fast dye would stain the skin and be objectionable from the customer's point of view. The colours usually preferred are:—*Red*—neutral red, eosin; *Pink*—eosin, erythrosin, safranin; *Orange*—chrysoidine; *Yellow*—tartrazine, auramine; *Green*—naphthol green; *Violet*—Hoffman's violet; *Heliotrope*—phenol red; *Blue*—patent blue.

D. J. C. (2/9).—RABBIT PEST.—The method of dealing with rabbits by means of cotton wool impregnated with liquid was described in our issue of May 25, 1935. It was not a method of bringing the rabbits out of their burrows, but actually killing them in their holes, as you will see from the following description: The liquid used was carbon disulphide. The amount of chemical used varied with the size of the burrow. Six were fumigated during the day and these required a one-gallon tin of carbon disulphide, which worked out at about 11½ lbs. In addition to the carbon, a smoke mixture was also used in order to make the fumes visible. About two hours after the treatment of the first burrow was completed, some dead rabbits were dug out. Prior to the demonstration, rabbits had been seen in large numbers, while a week later the burrows remained still unopened.

G. A. O. D. (6/9).—MIST. PHENAZON. CO.—You do not mention the date of the prescription, but the formula now in use in London is that of the National Formulary, as follows:—

Phenazon.	..	..	..	..	gr. v.
Pot. brom.	..	..	..	..	gr. vii. ss.
Sod. sal.	..	..	..	..	gr. v.
Spt. am. arom.	..	..	..	..	℥ x.
Aq.	..	..	..	ad	℥ ss.

H. & Co. (3/9).—PLANT FOR IDENTIFICATION.—This is a garden plant, and not British. It is *Macleaya cordata* R.Br. (*Bocconia cordata* Willd.), a small plant of the poppy order (Papaveraceæ) belonging to China and Japan. It was grown in Kew Gardens some years ago and has been introduced by florists in other parts of the country. The plant is known as Polohui in China, where it is occasionally used in medicine. Like most of the plants of this family, it is regarded as poisonous.

C. R. (8/80).—CHUTNEY.—"Pharmaceutical Formulas," Vol. II, contains recipes for a large number of sauces and chutneys, including the following for

Tomato Chutney

I					
Green tomatoes	..	..	..	4	lb.
Demerara sugar	..	..	..	1½	lb.
Sultanas	..	..	..	1	lb.
Mustard seed	..	..	..	1	oz.
Garlic, pounded	..	..	..	½	oz.
Cayenne	..	..	..	½	oz.
Ginger	..	..	..	1	oz.
Pickling vinegar	..	..	..	2	pints

Put the tomatoes, sugar and vinegar into an enamelled pan and boil to a pulp, then add the other ingredients and boil four minutes longer.

II					
Peeled tomatoes	..	..	..	4	lb.
Apples, pared and cored	..	..	..	2	lb.
Brown sugar	..	..	..	2	lb.
Sultana raisins	..	..	..	1	lb.
Table salt	..	..	..	4	oz.
Green ginger	..	..	..	3	oz.
Bruised mustard seed	..	..	..	2	oz.
Garlic	..	..	..	2	oz.
Bruised capsicums	..	..	..	½	oz.
Vinegar	..	..	..	2	qts.

Prepare the solids in the usual manner, boil in the vinegar until tender, then pass through a coarse sieve.

Retrospect of Fifty Years Ago

Reprinted from
"The Chemist and Druggist," September 10, 1887

Dispensing under Difficulties

Pharmacist Aid-major Lahache, a graduate of the Paris College of Pharmacy, writing from Biskra, the southernmost point of civilised Algeria, relates some of the difficulties encountered by the pharmacist who tries to follow the French Codex near the Sahara desert. "After May," he says, "it is hardly possible to dispense an ointment or a salve in Biskra, both lard and vaseline remaining almost constantly liquid; mercurial ointment separates into two layers, one quite fluid and transparent, and the other semi-liquid, but holding still the metal in suspension. Cocoa butter is useless, so are suppositories; the temperature of the human body being during the day inferior to that of the atmosphere, any composition that would be solid before introduction would not melt in the cavities for which such medicaments are intended, a state of things contrary to all pharmaceutical ethics. Woe to the pharmacist who would leave unstoppered any bottle of ammonia, collodion, or tincture! Crystallised sulphate of soda begins to liquefy in June, to become solid again only in September. The same is the case with carbolic acid. Adhesive, gold-beater's skin, and court plasters cannot be used."

Your Winter Dispensing Requirements MAY WE QUOTE YOU?

50 & 100
Wr. Qt. CONTRACTS
Terms on Application



BURGOYNE BURBIDGES & CO. LTD.
LONDON E.C.6. EST. 1741.

SUPER QUALITY

ASK US TO
QUOTE
FOR

**GLAUBER
SALTS B.P.
EPSOM
SALTS B.P.**

Special types of crystals matched. Any degree of exsiccation to order.
PACKED FOR HOME OR EXPORT.
All grades conform to the new 1932 B.P. Standard.

HARRIS, HART & Co., Ltd.
MOSS HOUSE CHEMICAL WORKS, BLACKLEY,
MANCHESTER

Telegrams: Harp, Blackley, M/c. Telephone: Cheetham Hill 2853.

**PETROLEUM
JELLIES**

PURFINOL

**LIQUID
PARAFFIN** **TECHNICAL
OILS**

PURFINOL LTD.
BRETTENHAM HOUSE, LANCASTER PLACE,
STRAND, LONDON, W.C.2

Telephone: Temple Bar 1318 & 1319 Cables: "Invatore, Rand, London"

**WE SPECIALIZE IN
THE MANUFACTURE OF**

GALLIC ACID-PYROGALLIC ACID

PURE & TECHNICAL **RESUBLIMED, PURE CRYSTAL & TECHNICAL**

WHOLESALE & EXPORT ONLY. Enquiries Invited

J. L. ROSE, LIMITED, ABBEY ROAD, BARKING, ESSEX
TELEPHONE: RIPPLEWAY 2763 TELGRAMS: "GALLIC, BARKING."

**PACKED OR
IN BULK** **TABLETS** **(Compressed)**

● Specialists for over 30 years in all kinds of Medicinal Tablets. Purity of Drugs and Accuracy of Dosage Guaranteed. Let us put up your own Speciality in Tablet Form. Secrecy of Formula Guaranteed.

CONTRACEPTIVE TABLETS (various)

THE IMPROVED "PREMIER" TABLET MACHINE
Will stand up to the hardest work. (Full instructions for making tablets with each machine.) Price £14 - 14 - 0
Also Power Machine on Stand. £18 - 18 - 0

BUCKLEY-BOWKER TABLET CO., LTD.
MANUFACTURING CHEMISTS & PHARMACEUTICAL ENGINEERS 29 Parkfield Street, London, N.1 Telephone: Clerkenwell 1401

ALKALOIDS

FINE CHEMICALS AND OPIUM DERIVATIVES

*Goods
covered by
Dangerous Drugs
Acts offered
subject to all
regulations*

Aloin · Atropine · Bismuth Salts · Caffeine · Cantharidin
Capsicin · Chloroform · Chrysarobin · Codeine · Diamorphine
Emp. Canth. Liq. · Ephedrine · Ergotin · Eserine · Ethyl-
morphine · Gingerine · Hyoscyamine · Jalap Resin · Leptandrin
Morphine · Opium · Podophyllin Resin · Salicin · Santonin
Scammony Resin · Strychnine · Veratrine and other
Pharmaceutical Chemicals and Preparations.

T. & H. SMITH LTD.

25 CHRISTOPHER STREET, LONDON, E.C.2

*Blandfield Works,
Edinburgh,
32-34 Virginia St.,
Glasgow*

Standard Synthetics Ltd.

Managing Director: J. L. Hindle, B.Sc.

"HINDLE WAKES" UP THE INDUSTRY

SPECIALISTS IN PURE ESSENTIAL OILS

*We are actual distillers and first-hand
importers of:—*

CINNAMON BARK OIL, B.P.	OL. SUCCINI, RECT.
JUNIPER BERRY OIL, B.P.	PEPPERMINT OIL TRIPLE
GENUINE OIL OF SWEET	RECTIFIED, B.P.
BIRCH (WINTERGREEN OIL)	LEMON OIL, B.P.
LAVENDER OIL FRENCH	ANISEED OIL, B.P.
38/40%, B.P.	CAMPHOR OILS
EUCALYPTUS OIL	CLOVE OIL B.P.
70/5%, B.P.	

*All Goods in Stock. Prompt Service
Quick Deliveries*

76/78 GLENTHAM ROAD, BARNES
LONDON, S.W.13 Phone: Riverside 3616/7

SOUTH AFRICA

*is an Important and Growing
Market for British Products*

LENNONS,

the Old Established Chemists, cover
the whole of the Country. They have
Efficient Wholesale Facilities for In-
tensive Distribution and Distinctive
Retails in the Important Towns



Those who wish to exploit the Market
or increase their present business
should write the London Office:—

LENNON LIMITED,
12/14 LAFONE STREET,
LONDON, S.E.1



Hubbuck's Pure Oxide of Zinc

is made by sublimation and is
warranted to contain upwards of

99.9 PER CENT.

of pure oxide; in fact, the
impurities are not traceable

Thos. Hubbuck & Son, Ltd.

ESTABLISHED 1765

24 Lime Street, London, E.C.3

MANUFACTURERS OF WHITE LEAD, WHITE
ZINC, PAINT, OILS, COLOURS, VARNISHES, &c.

Australian Office : 34 Queen Street, Melbourne

*Sold by the following Wholesale Druggists
in Boxes of 7 lb. and 14 lb. stamped by
the Manufacturers; also in 1-lb. Boxes
and 1-lb. Glass Bottles :*

Allen & Hanburys, Ltd.	Hirst, Brooke & Hirst, Ltd.
Ayrton, Saunders & Co., Ltd.	Horner, L. A., & Sons
Bell, Jno., & Croyden	Huskisson, H. O., & Co.
Bell, John, Hills & Lucas, Ltd.	Lothouse & Saltmer, Ltd.
Bessdale, Ltd.	Mackay, Jno., & Co., Ltd.
Boots Pure Drug Co., Ltd.	May, Roberts & Co., Ltd.
British Drug Houses, Ltd.	Odfield, Pattinson & Co.
Brook, Parker & Co., Ltd.	Pinkerton, Gibson & Co., Ltd.
Burgoyne, Burdidge & Co., Ltd.	Porter & Clarke, Ltd.
Butler & Crispe	Raines & Co.
Cockburn & Co., Ltd.	Raines, Clark & Co., Ltd.
Dakin Brothers, Ltd.	Rankin & Borkand
Duncan, Flockhart & Co.	Silversides, R. B. G.
Evans, Gadd & Co., Ltd.	Smith, T. & H., Ltd.
Evans Sons Lescher & Webb, Ltd.	Southall Bros. & Barelay, Ltd.
Ferris & Co., Ltd.	Sumner, R., & Co.
Gale Bais & Co., Ltd.	Taylor, Jas. (Tringate), Ltd.
Glasgow New Apothecaries Co.	Thompson, John, Ltd.
Goodall, Backhouse & Co., Ltd.	Wilkinson & Simpson, Ltd.
C. R. Harker, Stagg & Morgan, Ltd.	Willows, Francis, Butler & Thompson, Ltd.
Hartness, Beaumont & Co., Ltd.	Woolley Jas., Sons & Co., Ltd.
Hatrick, W. R. & Co.	Wright, Layman & Umney, Ltd.
	Wyleys (Lim.)

Barry, E. J., New York
Finlay Dicks & Co., New
Orleans
E. Fougere & Co.,
90-92, Beekman Street
New York
Chas. L. Huisking & Co., Inc.,
155, Varick St., New York
Lohn & Fink, Inc., N. York
McKesson & Robbins, Inc.,
New York

Muth Brothers & Co., Balti-
more
Palmer, Ltd., Montreal
S. B. Penick & Co., Inc.,
New York
Roller & Shoemaker, Phila-
delphia
Schieffelin & Co., Inc., New
York
Shoemaker & Busch, Phila-
delphia

SOLAZZI Liquorice Juice

The Chemist's Brand

Should any enquiries as to the composition
of SOLAZZI be received from the Public,
Chemists are requested to emphasise the fact
that SOLAZZI is not included in the category
of Secret Remedies, and that the following
guarantee obtains with every parcel.

*Solazzi Juice is
guaranteed to consist entirely
of the condensed extract of
finest Calabrian Liquorice Root,
without any admixture whatever*

A. & M. ZIMMERMANN
Petri Bros. Ltd. Proprietors

CHEMICALS
Pharmaceutical
Technical
Chlorophyll
all
Grades

COD
LIVEROIL
Phenol
Salicylates
Marseilles Soap

**3 LLOYDS AVENUE
LONDON. E.C.3**

The Finest for all Cosmetics . . .

WESSANENS

PRIME COCOA BUTTER

B.P. Quality

This excellent brand of cocoa butter is unequalled for the
preparation of face creams, lipsticks, sunburn creams, etc. etc.
Being free from adulterants and having a low melting point, it
can be relied upon for all pharmaceutical and cosmetic purposes.

DEODORISED COCOA BUTTER

a speciality

KEENLY COMPETITIVE IN PRICE

Write for sample and direct quotation

A. PRESCOTT

323 Corn Exchange, Cathedral Street, MANCHESTER 4

EVANS, GADD & CO., LTD.

Wholesale & Manufacturing Chemists

BRISTOL and EXETER.

Telephone : Bristol 20358, 20359.
" Exeter 2278, 2279.

Telegrams : Gadd, Bristol.
" Gadd, Exeter.

LARGE STOCKS. *DRUGS,*
 GALENICALS, **QUICK**
 PATENT **DESPATCH.**
 MEDICINES,

PROPRIETARY ARTICLES, SURGICAL DRESSINGS,
VETERINARY MEDICINES, ETC.

BURNSIDE'S

AUSTRALIAN EUCALYPTUS OIL

(Shipped by W. K. BURNSIDE PTY., LTD., 34/36 JEFFCOTT STREET, MELBOURNE)

ALL B.P. GRADES

70/75% B.P.
A specially rectified Oil of
high and very uniform Quality

Packed in Cases and Drums
STOCKS IN LONDON

80/85% B.P.
Distilled from E. POLYBRACHTEA
The finest B.P. Oil obtainable

All Grades can be relied upon to be Constant in Quality, Odour and Colour

19 PHILPOT LANE
LONDON, E.C.3

AGENTS FOR U.K.

WILSON & MANSFIELD, Ltd.

'Phone : MANSION HOUSE 9264-5-6
'Grams : WYFIELD, LONDON

WHOLESALE ONLY

"GOLD MEDAL" CREAM EMULSION OF COD LIVER OIL WITH HYPOPHOSPHITES

Attractively Labelled and Packed. Tasteless and Inseparable. Many other styles of own name Emulsion Packs available.

Send for Samples and Prices to :

GALE, BAISS & CO., LTD.

Emulsion Specialists. Wholesale & Export Druggists & Sundriesmen.

Telephone :
New Cross 0094

CANTERBURY ROAD, LONDON, S.E.15

Telegrams :
" Dreadnought, Peck, London "

W.B. DICK & CO. LTD



BY APPOINTMENT

PARAFFINUM LIQUIDUM B.P.
ALL SPECIFIC GRAVITIES GUARANTEED TO REMAIN BRIGHT AT 0°C

B.P. WHITE & YELLOW PETROLEUM JELLIES

WHITE AND HALF WHITE OILS

SEND FOR SAMPLES AND QUOTATIONS (WHOLESALE ONLY)

26 GROSVENOR GARDENS, LONDON, S.W.1
Sloane 3461 (7 lines)
Telephone - "Dicello, Phone, London."
Telegrams - "Dicello, Phone, London."
GLASGOW, LIVERPOOL, NEWCASTLE,
CARDIFF AND NEW YORK.



The Andrews Hygienic Seal
—a patented damp-and-dust-
proof Cellophane Cap—
maintains original laboratory
condition.

*The Saline with
the World's
largest Sale*

ANDREWS' LIVER SALT
EFFERVESCENT

Ergoapiol-(Smith)
REG. U. S. PAT. OFF. & FOREIGN COUNTRIES

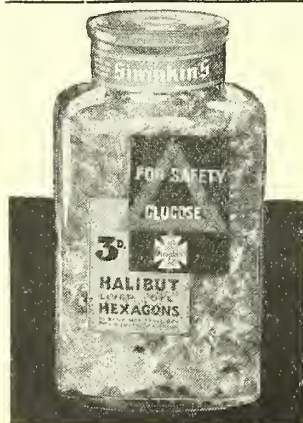
CONSTANT prescription demand is assured by our continuous and extensive advertising campaign.

An adequate stock of ERGOAPIOL should be maintained at all times. Supplied only in packages of twenty capsules each.

For the mutual protection of the ethical pharmacist, the physician and our product, the initials "MHS" are embossed on the inner surface of each capsule, visible only when capsule is cut in half at seam as shown.

MARTIN H. SMITH COMPANY
NEW YORK, N.Y., U.S.A.

THOS. CHRISTY & CO., 17 OLD SWAN LANE, LONDON, E. C. 4
Agents for Great Britain and Ireland

see the effect of the new labels

Simpkin's GLUCOSE CONFECTIONS

Ask for details
of the new
"Medicated"
bonus offer.

at the **CHEMISTS' EXHIBITION**
STAND B16 and Demonstration Window Display

A. L. SIMPKIN & CO. LTD. (Dept. C.D.), Barley Sugar Works, Sheffield, 6

YOU CAN INCREASE -

— your turnover and secure greater profits by exhibiting the attractive PAG JUNIOR Show Stand in your window.

Many chemists throughout the country are already profiting by the constant demand for the RIDDELL Asthma Treatment—the treatment that has received the unqualified approval of the medical profession.

Write to-day for full particulars.



FRANCIS RIDDELL LTD.

AXTELL HOUSE, WARWICK STREET, REGENT STREET, LONDON, W.1.

Paraffinum Liquidum B.P.

ALL
GRADES
SAMPLES & PRICES

On application
to

Sterns Ltd.
16, Finsbury Sq. London, E.C2

Telephone : National 7643 (- lines)
Telegrams : Centumvir, Phone, London

ALSO
TECHNICAL
QUALITIES

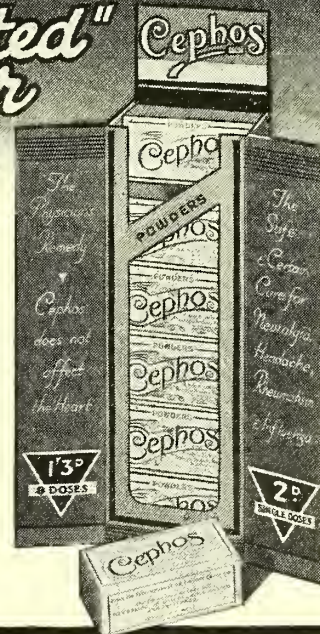
Cephos

See-foss REGD
THE PHYSICIAN'S REMEDY
a "Noted" Seller

An important chemist's line such as the Physician's Remedy deserves a prominent display on your counter. The new Cephos packs have been designed to command attention without taking up too much of your valuable counter space. They are colourful yet dignified and constructed so as to ensure quick service.

**The
Counter
Pack that
ensures
Peak Sales**

Cephos Ltd., Blackburn.



INSECT BITE CREAM

Conveniently packed in collapsible tubes that can be carried in the pocket or handbag ready for immediate application.

Small, 5/6 doz. net. Large, 9/6 doz. net.

INSECT BITE LOTION

Made with industrial alcohol, is penetrating but rapidly evaporates providing a cooling application that affords quick relief or acts as an effective repellent.

In sprinkler top bottles, 2 oz. 5/6 doz. net. 4 oz. 9/6 doz. net.

Name and address printed Free on three dozen.

MANUFACTURED BY

C. J. HEWLETT & SON, LTD., 35/42 Charlotte St., London, E.C.2

It will pay you to stock them!

When the public demand goods bearing a specified name the wide-awake retailer prepares to meet that demand and so reap the benefits which follow.

IGLODINE has become a household word, and the public, through satisfaction which comes after trial, are demanding **IGLODINE PREPARATIONS**. Are you the retailer who is preparing to meet the demand?

·Iglodine·

The Safe and Sure Antiseptic

Write to-day for full particulars to:
THE IGLODINE CO., LTD. - Newcastle-on-Tyne

Semper Eadem

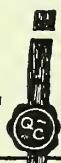
With Liquid Paraffin constancy is recognised to be absolutely essential. Chemists who obtain their supplies from us, do so because they know that they are sure of obtaining an oil of high and unvarying quality.

Our steadily increasing sales are proof of the growing realisation of this important fact.

C.E. THURLEY & SON
UNITY WORKS

PHONE: MARYLAND 4556

LATIMER ROAD E.7



Rivista Italiana delle Essenze, dei Profumi e delle Piante officinali

EIGHTEENTH YEAR OF PUBLICATION

OFFICIAL ORGAN OF THE FENACHIMICI

Director : - - - - Dr. EMMA FENAROLI

Editorial Offices : - VIA S. VINCENZO N.38 MILAN

Telephone : 31 216-C.P.850

Producers of Aromatic Substances for Perfumery—Manufacturers of Articles used in the Perfumery Trade—This is the Periodical in which to Advertise effectively in Italy.

MAKE USE OF ITS ADVANTAGES

SAMPLE COPY AND TARIFF ON REQUEST

We are Mailing
EVERY MEMBER of
the MEDICAL PROFESSION

With Literature Concerning The Remarkable Success Of

BELZEMA
BRAND OINTMENT AND

CLINICAL SAMPLES ARE BEING OFFERED
TO ALL DOCTORS

Authentic Clinical Reports show that BELZEMA OINTMENT & BELZEMA SOAP fully justify every claim made in the advertising columns of the Lancet and British Medical Journal.

BELZEMA OINTMENT IS SUPPLIED IN 3 SIZES:
1 oz.: 4/6d. 1½ oz.: 8/- 4 oz.: 12/-
BELZEMA SOAP - - - - - 2/- per tablet.

Prices quoted are retail.

Supplies may be obtained from the sole agents:

BROOKS & Warburton, LTD.
232 VAUXHALL BRIDGE ROAD, LONDON, S.W.1

or from any wholesaler.

BELZEMA SOAP
BRAND

IN THE TREATMENT OF OBSTINATE SKIN CONDITIONS:

ECZEMA • PSORIASIS • RINGWORM
ACNE • DANDRUFF • ALOPECIA

NORWEGIAN COD LIVER OIL



There is no efficient substitute
for Norwegian Cod Liver Oil.

Take the direct road to Nature's fount
of health, Norwegian Cod Liver Oil; you
will then be on safe ground. Always
ask for Norwegian Cod Liver Oil.



*You can recommend
HOSEZENE with confidence*

High standards of manufacture secure for you repeat sales without difficulty.

HOSEZENE Sterilised Accouchement Sets, Sanitary Towels and Belts, Baby Pants, Nursing Aprons and Cotton Wool are all produced from the best quality materials and show good profits.

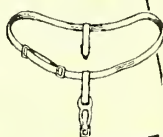
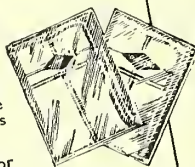
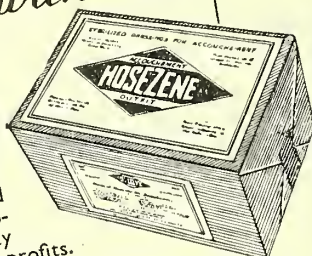
HOSEZENE Sanitary Towels are supplied in 3 forms:—

PERFECT with the knitted cover and loop ends. Retail at 1/- and 2/9 per dozen.

SOLUBLE packed in cartons of one dozen to sell at 1/- to 1/6 per dozen. Has no equal for easy disposal.

COMPRESSED in great demand for holidays and travelling. In cartons of one dozen to retail at 1/3 to 2/3 per dozen.

Free Samples and terms on application to the manufacturers:—



THE HOSEZENE
Co. Ltd., NOTTINGHAM

The **VIC** wrist support
is a sales stimulant



NOTE THE PATENTED
SIMPLE ELASTIC FASTENING
STOCK & DISPLAY
THIS PROFITABLE LINE

The most simple to use, easy to fix fastener on the market—accept no substitute.

Your customers will insist upon the original and popular Vic wrist support, with patented elastic fastening. Strong, durable, washable and hygienic. Stocked in Natural, Flesh and Tan by all leading Wholesalers.

6 Assorted Colours on Display Cards.

RETAIL
SELLING
PRICE
9s
EACH

Sole Manufacturers

GROUT & CO. LTD., 35 WOOD ST., LONDON, E.C.2

INSTITUTE OF HYGIENE
INCORPORATED BY
ROYAL CHARTER



CERTIFICATE
AWARDED
IN RESPECT OF

"DORSELLA" MILK FOOD

ENGLISH DRIED MILK

Enquiries are solicited for the following:

FULL CREAM "DORSELLA" DRIED MILK

HALF CREAM SEPARATED "PARAGON"

CASUMEN, SOLUBLE MILK PROTEID

SWEETWHEY, CRYSTALS or POWDER

KENCREAM FOR PUPPIES

UNITA (Dorsella and Casumen)

DRIED BUTTERMILK

Supplied in Bulk, Tins or Cartons

Quotations and samples gladly sent on request.

PRIDEAUX'S, LTD.,
MOTCOMBE, SHAFTESBURY, DORSET

Telephone : Shaftesbury 4

C. & D. Stock-Taking Pads

Halve the Labour of Taking Stock

Price of Complete Pad, 2/6 most free

The Chemist & Druggist, 28 Essex St., London W.C.2

Publications Dept.

DOMOLENE The Miracle Ointment, Price 1/6.
stops Pimples, Boils, etc.

DOMOLENE-WOOL Stops Blood Poisoning
Price 1/6 (Trade) per 1/2 doz. 6/9

NATIONALLY ADVERTISED

Of all wholesalers

DOMO REMEDIES LTD., Plantation House,
FENCHURCH ST., LONDON, E.C.3 'Phone : Mansion House 5754

TABLETS, PILLS, LOZENGES

We are manufacturers for the Wholesale Trade.

If you buy large or regular quantities, please write for quotations.

BROOK, PARKER & Co. Ltd., BRADFORD

BLYTON, ASTLEY & CO. LTD.

Eagle Laboratories, Lr. Broughton, Manchester,
FOR

LOZENGES, PASTILLES, "MENTHELLS,"
and Quick-Selling SPECIALITIES.



FIVEPOINT
REGISTERED

Surgical Syringes & Instruments

To get the best discounts buy on Agency Terms. Special Agents are now being appointed in all main centres

**HYPODERMIC & SERUM
SYRINGES & NEEDLES**

WHOLESALE &



ESTABLISHED 1890

**INSULIN & TUBERCULIN
SYRINGES & NEEDLES**

EXPORT ONLY

Manufacturers of:

Fivepoint Record

Fivepoint Glascord

Fivepoint Two-piece
Glass and other Syringes

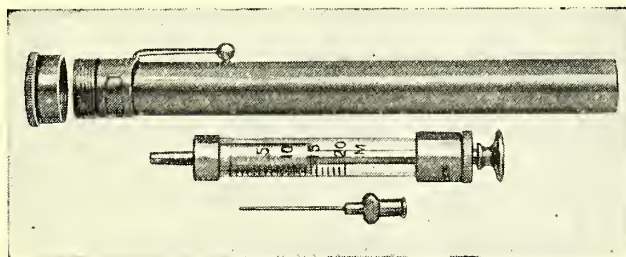
BARRELS
FROM
ANNEALED
GLASS
OR
PYREX GLASS

APPLY FOR : ILLUSTRATED LIST
& PARTICULARS



Fivepoint Midget Syringe
for Insulin Injections.

PYREX GLASS POSSESSES STRENGTH AND DURABILITY. IT DOES NOT CRACK OR BREAK WHEN SUDDENLY TRANSFERRED FROM 300°C. TO WATER AT 5°C. THIS ATTRIBUTE IS A BOON TO MEDICAL MEN, HOSPITALS AND INSTITUTIONS



Broken syringes of any make can
be repaired with Pyrex glass.

The latest Pocket Type—Spirit proof case—Hypodermic Syringe and Needle is known as **The Fivepoint-Midget**. The case dimensions are 5 inches long by $\frac{1}{2}$ inch diameter, this being the size of the average Fountain Pen

APPLY FOR PARTICULARS

Telegrams :
"TOURNIQUET,"
SMITH, LONDON

GENERAL SURGICAL CO., LTD., ROSEBERY AVE., LONDON, E.C. 1

Telephones :
TERMINUS
1046, 1047, 1048

**GENERAL SURGICAL CO. LTD. DO NOT SUPPLY
DOCTORS · HOSPITALS & INSTITUTIONS DIRECT**

**All orders and enquiries received from these
sources are forwarded to nearest Agents**

★Get full particulars now.




WHOLESALE & EXPORT ONLY
HYPODERMIC NEEDLES
 OF ALL DESCRIPTIONS

S.&R.J. EVERETT & CO., LTD.

Needles to N.H.I.
 Specification

939, LONDON ROAD,
 THORNTON HEATH, LONDON, S.W.16



Hobson's Choice
 FEET POWDERS

REG. TRADE MARK

★ **ON THE AIR from Radio Lyons**

JULY 15th to OCT. 8th • every Friday 10 p.m. - 10 15 p.m.
 We make you customers by tram, RADIO and Newspaper advertising etc.

NOTE CHANGE OF ADDRESS **HOBSON, TRIMBLE & CO. LTD.**
 UNION HOUSE • BRIDGE STREET • LEEDS • 2

FOR FAST SALES

and big profits



WHOD HAVE
 THOUGHT IT?
 AN OLD BLADE
 AS SHARP
 AS NEW!

Stock up "PIFCO" Sharpex Razor Blade Stoppers. They sell on sight, being nationally advertised. For economy and clean shaving, Sharpex Stoppers are unequalled. 2s. each. For trade discount apply to—

PIFCO LTD., Watling Street, Manchester
 London Office: 150 Charing Cross Road, W.C.2

WE CAN HELP YOU

in furnishing you with Surgical and other sundries to give a high average profit!

Enquiries will receive our prompt expert attention

REYNOLDS & BRANSON Ltd., 13 Briggate, LEEDS 1

Telegrams: REYNOLDS Leeds Telephone: Leeds 20046

Prentif

THE NAME BEHIND THE APPROVED
 CONTRACEPTIVE PRODUCTS

"Prentif" Non-greasy Gelatine Suppositories and the smaller "Prenols," the approved chemical contraceptives for use with any mechanical appliance. Maximum spermicidal power, accurate melting point and many other improvements make these Suppositories the best obtainable. Very generous Trade Terms.

"Prentif" Condoms and Sheaths are supplied in dated packings. Out-of-date goods are exchanged without deductions. Stocks are always fresh and lasses entirely avoided.

Particulars, Prices and Samples from:

PRENTIF LIMITED

Long's Court, St. Martin's St., London, W.C.2

Telephone: WHItchall 9270.

CHEMISTS' EXHIBITION 1937

Do not fail to visit our Stand No. 2, Block D

"Prentif" Products are entirely British made and the retail sale is strictly confined to Chemists.



HEWARDS OF TWICKENHAM

SPECIALISE IN ALL KINDS OF
**SURGICAL
 APPLIANCES**

Send your Enquiries to

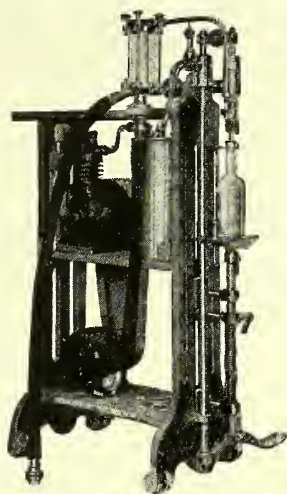
THE
R. H. HEWARD Co.
 CROWN ROAD WORKS
 TWICKENHAM
 MIDDLESEX

Telephone: Popesgrove 2243, 2244

Telegrams: Beltruss, Twickenham

or through your wholesaler

ROBERTS' PATENT "LEO" VACUUM FILLER



for Glass, Stone,
and Tin Bottles.
Fills all sizes from
drachm to quart—
long, short or
sprinkler neck.

**Clean and Rapid
No Over-Filling
Broken Bottles
Rejected
Easy to Clean
Self Rinsing**

WRITE FOR
PARTICULARS

Roberts' Patent Filling Machine Company Limited

33 Roundcroft Street, Bolton, Lancashire

Makers of every description of Bottle Filling and Shallow
Jar and Tin Filling Machine for the Chemists' use

ALL RIGHTS RESERVED

THE "CLINIC" N.H.I. HYPODERMIC NEEDLES

Record Fitting with Soft Metal Mount

Each Needle packed in a Cellophane
Carton, packed 12 Cartons in a Box.

Size distinctly marked both on carton
and Needle Mount.

CARBON STEEL	STAINLESS STEEL
2/6 Dozen	3/6 Dozen

Extra discount for 1 Gross lots.

A Display Card with one each™ of the
8 principal sizes, in Stainless Steel free
with orders of not less than 6 Dozen.

BRITISH MAKE

BRITTON, MALCOLM & WAYMARK, LTD.

The Surgical Sundry House,

38 SOUTHWARK BRIDGE ROAD, LONDON, S.E.1

Telegrams : CLINBRITIC BOROH, LONDON (2 words)

WE SUPPLY

DECORATED TINS

FOR PACKING

OINTMENTS

AND OTHER PRODUCTS

SAMPLES AND PRICES UPON REQUEST

THE CALDICOT TIN STAMPING WORKS LTD.

CALDICOT, Nr. CHEPSTOW, Mon.

There is going to be a big demand for

SOUTHALLS "CELTEX" SOLUBLE SAN TOWELS

Single



Cartons

ALSO MAKERS OF

"ORIGINAL" & "K" SAN TOWELS



BOTTLE BOXES

of all kinds

PACKING CASES, CRATES, DRAINERS, etc.

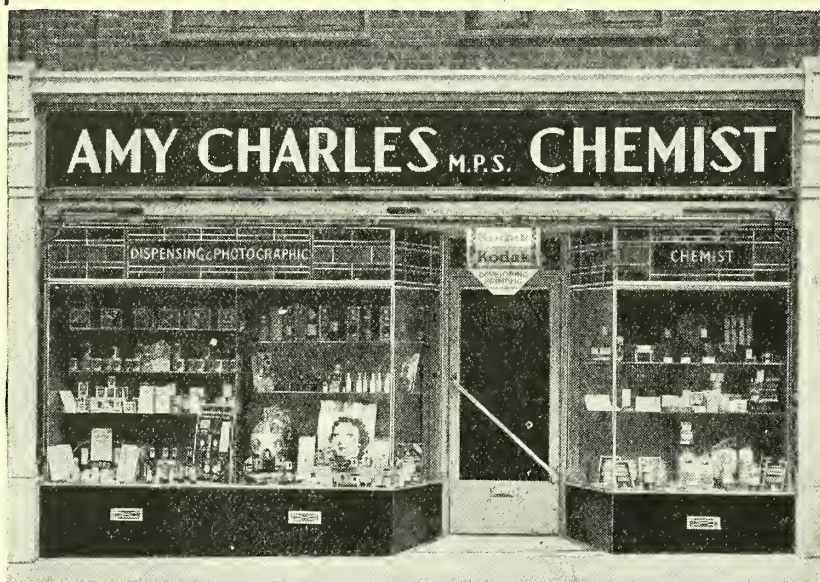
HENRY HADFIELD, Ltd.

South Accommodation Rd., HUNSLET, LEEDS, 10

*Phone
24070 LEEDS

Grams:
PACKING PHONE,
LEEDS

RUDDUCK & CO



HAVE SPECIALISED IN
**CHEMISTS'
SHOP FRONTS
AND
INTERIOR FITTINGS**
FOR MANY YEARS

LET US PLAN YOURS

No obligation is incurred by
letting us submit designs and
estimates and no charge is made.

RUDDUCK & CO.
219 & 227 OLD STREET
LONDON, E.C.1

'Phone : Clerkenwell 3782-3-4

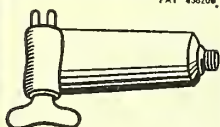
BRITISH MADE

METAL SMALLWARES

of every description

ROLATUBE KEY

PAT. 430206



NO MESS — NO WASTE

Can be used hundreds
of times

Supplied stamped
with your name and
address as a perman-
ent advertisement

Particulars on application

SEND FOR CATALOGUE

**L. ELBOZ
& SON**



RAYON D'OR WORKS
94 FERNDENE ROAD,
LONDON, S.E.24, TEL. Brixton 3456

THE SOUTH OF ENGLAND COLLEGE OF PHARMACY

Principal — H. LUCAS, Ph.C., F.C.S.

"THE SCHOOL FOR SUCCESS"

This College affords systematic instruction in the
subjects for the Preliminary Scientific and
Qualifying Examinations.

New Courses start for the Preliminary Scientific and Quali-
fying Examinations on October 5th. Each extends for nine
months, and the fee is 30 guineas per course.

ENTRIES ARE NOW BEING BOOKED

For all particulars, entry form, etc. apply THE PRINCIPAL —
186 CLAPHAM RD., LONDON, S.W.9. Phone : REL. 2037

Caps!

Corks!

Stoppers!

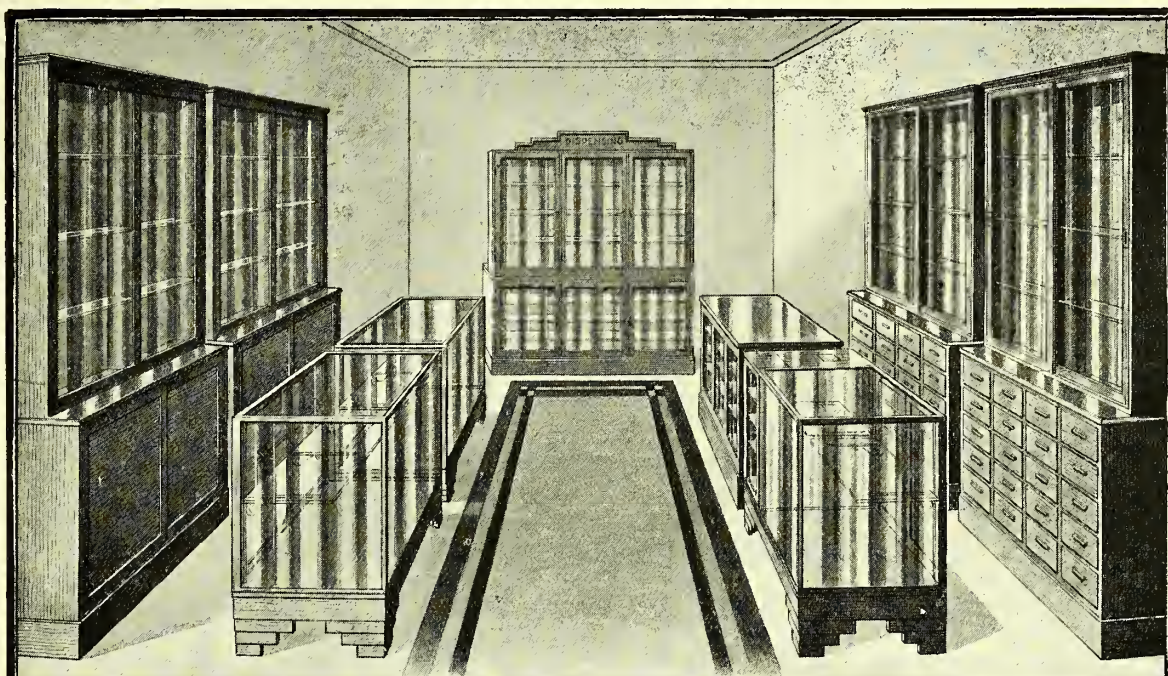
Closures!

Whatever and however you pack

see the *Armstrong* range!

Chemists' Exhibition 1937, Albert Hall,
September 20-24. Block C, Stand 36

Armstrong Cork Co. Ltd., Kingsbury, LONDON, N.W.9

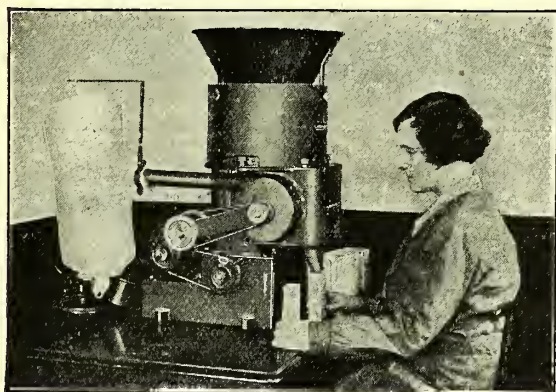


Your Shop can look like this — imagine this handsome set of Fixtures and Counters in your premises and remember they can be had for **£131.0.0**

Owing to the increased cost of raw materials we are reluctantly compelled to charge an increase of 5% on our prices. Supplied immediately on deferred payments involving a small initial payment. Let us send you our Catalogue No. C.D. 1740

DUDLEY & COMPANY, LIMITED, 451-3 Holloway Rd., London, N.7 City Showrooms: 65 Fore Street, E.C.

JACKSON-CROCKATT PATENT FILLING MACHINES FOR ALL POWDER MATERIALS



"MINOR" LOOSE-FILLING MACHINE WITH DUST COLLECTOR

For Filling

Shampoo and Soap Powder, etc.

The fastest, cleanest and cheapest machine for filling small packets and envelopes

Self-Contained motor drive

J. G. JACKSON & CROCKATT Ltd.
ENGINEERS
DARNLEY STREET, GLASGOW, S.I

THE "LAUDER" No. 4a Compressed Air FILLING MACHINE

(Patent No. 404419)

We manufacture various types of smaller filling machines, and invite correspondence on your filling problems.



"It pays for itself almost at once." It is used by all the leading manufacturing chemists, perfumers, etc., etc., at Home and Abroad. Is a really sound engineering job—not a toy—will give many years of trouble-free service, and fills almost any type of liquid into sprinkler neck or ordinary containers with maximum speed. Made in strong Stainless Steel in sizes of 2-gallon capacity upwards.

L. T. LAUDER
46 St. Martins Ave., LEEDS 7

Telephone: 43039

Telegrams: LAUDER, LEEDS 43039



PHARMACY for the PHARMACIST

GENASPRIN 6^{d.} and 2/-
THE SAFE BRAND OF ASPIRIN
THE "CHEMISTS ONLY" ASPIRIN

GENOZO TOOTH PASTE 6^{d.} : 1/- : 1/6
BRAND
THE "CHEMISTS ONLY" TOOTHPASTE

CYSTOPURIN 1/3 : 3/- : 5/-
THE "CHEMISTS ONLY" BACKACHE AND
KIDNEY REMEDY

FISSAN ANAL OINTMENT 1/6
BRAND
THE "CHEMISTS ONLY" PILE REMEDY

The above "Chemists' Friends" lines are being consistently advertised. Will you help our policy of "PHARMACY for the PHARMACIST" by displaying and by personal recommendation?
GENATOSAN LIMITED, LOUGHBOROUGH, LEICESTERSHIRE.

The CHEMIST AND DRUGGIST SUPPLEMENT

This Supplement is inserted in every copy of The Chemist & Druggist

28 ESSEX STREET, LONDON, W.C.2

SEPT. 11,
1937

ADVERTISEMENT TARIFF

ALL ADVERTISEMENTS are PREPAID, so that remittance must accompany instructions in each case. If it be necessary to telephone or telegraph an urgent announcement this may be done, provided the money is telegraphed at the same time.

BUSINESSES WANTED and for **DISPOSAL, PREMISES TO LET** and **FOR SALE, PREMISES WANTED, PARTNERSHIPS, GOODS for SALE and AGENCIES**—6/- for 50 words; every additional 10 words or less, 6d. (Box No., 1/- extra.)

SITUATIONS OPEN—6/- for 40 words; every additional 10 words or less, 6d. (Box No., 1/- extra.)

SITUATIONS WANTED—2/- for 18 words; every additional 10 words or less, 6d. (Box No., 1/- extra.)

LEGAL NOTICES, TENDERS, AUCTIONS, and all specially-spaced announcements, 1/3 per nonpareil line (12 lines = 1 inch single column). (Box No., 1/- extra.)

MISCELLANEOUS (Wholesalers' Section) for odd and second-hand lots—10/- for 60 words: 1/- for every additional 10 words or less. (Box No., 1/- extra.)

EXCHANGE COLUMN (for Retailers, etc.)—Twopence per word, minimum 2/- (Box No., 1/- extra.)

REPLIES FROM ADVERTISERS—1/- per line; 3 lines 2/6.

THE CHEMIST & DRUGGIST, 28 Essex St., Strand, London, W.C.2

Telephone: Central 6565 (10 lines).

Telegrams: "Chemicus, Estrand, London."

CLOSING FOR PRESS

must reach us
not later than

FIRST POST THURSDAY MORNING

All advertisements intended for
insertion in this Supplement

ORRIDGE & CO.

56 LUDGATE HILL, E.C.4

ESTABLISHED 1846

Telephone Nos.: CITY 2283 & 7477

May be CONSULTED at their Offices on MATTERS of SALE, PURCHASE & VALUATION

We make no charge to purchasers, and invite intending buyers to communicate with us, stating their requirements

1.—ELEPHANT AND CASTLE (NEAR).—Medium-class General Retail Business with Panel Dispensing; takings last year £1,245, scope; good profits; main-road premises; stock worth £180; spacious living accommodation over with side entrance; rent £110 per annum; price £350 or offer; excellent opportunity.

2.—HOLBORN (NEAR).—General Retail Business with Photographic and excellent Panel connexion; takings £25-£30 per week; new fixtures and good stock; four-roomed house over; reasonable rent and rates; price for quick sale £500 all-at; Vendor returning North.

3.—KING'S CROSS (NEAR).—Old-established Business for sale owing to retirement following ill-health; turnover about £3,000 per annum; net profit to working proprietor about £550 per annum; stock and fixtures worth £1,100-£1,150; new lease will be granted at £170 per annum; offers invited.

4.—S.E. LONDON.—Good Middle-class Business taking £43-£45 per week, increasing; gross profit 35 per cent.; stock worth £500; good fixtures; new lease will be granted at £80 per annum, or premises can be purchased; rent practically covered by sub-lets; price asked £650 plus stock at valuation, which could be lowered to suit a purchaser.

5.—BUCKS.—High-class Business with valuable Agencies; returns about £2,700 per annum; good profits; excellent fixtures and good, clean stock; modern flat over; small garden; reasonable rent; price £400 plus stock and fixtures at valuation; worth attention.

6.—HERTS.—Well-established High-class Business with Photographic; turnover last year £2,260; net profit £456; main-road premises; mahogany fixtures; good, clean stock; stock and fixtures worth about £1,150; nice living accommodation over; rent £120 per annum; offers invited for the lease and goodwill, stock and fixtures to be taken at valuation.

7.—WELL (NEAR).—Good-class Business with small amount of Optical; returns £45-£47 per week; gross profit approximately £850 per annum; main-road premises; stock and fixtures worth £750; modern living accommodation over; moderate rent; long lease; price £400 plus stock and fixtures at valuation.

8.—TWICKENHAM.—Middle-class Business with sub-Post Office attached situate in excellent position; scope for vast increase under energetic management; returns present rate £22-£24 per week, plus Post Office remuneration; gross profit 33 per cent.; new lease at £104 per annum; stock worth £200; excellent flat over; price £800, or £600 without Post Office.

9.—HAMPTON COURT (NEAR).—Family Retail Business with Wine Licence; returns for last completed financial year £1,810, steadily increasing; good profits; main-road premises; stock and fixtures worth £770; living accommodation available; new lease will be granted at £80 rising to £100 per annum; valuation terms entertained.

10.—BARKING.—Middle-class Business with excellent Panel and Photographic; returns last year £1,347; net profit £350; attractive living accommodation; stock worth £300; rent £90; new lease; price £330 plus stock at valuation.

11.—FRINTON (NEAR).—Well-established Good and Middle-class Business with Photographic and Panel; returns well over £3,000 per annum; net profit last year £622; Accountant's figures; nice living accommodation over; rent £110 per annum; price £2,500; genuine reason for disposal.

12.—MIDLANDS.—Old-established High-class Business with valuable Agencies and good sale for own preparations; returns last year £4,268; excellent profits; prominent position occupied; stock and fixtures worth well over £2,000; exceptionally spacious living accommodation attached, part of which could be sub-let if desired; price for immediate sale £3,500, or valuation terms entertained.

13.—ESSEX COAST.—Good Middle-class Business with excellent Private Dispensing connexion; returns exceed £3,200 per annum; good profits; valuable fixtures and heavy stock; spacious living accommodation over; reasonable rent and rates; price £2,250 all-at.

14.—PORTSMOUTH.—General Retail Business, all cash trade; turnover last year £1,574; double-fronted shop in main road; nice living accommodation over; stock worth £550; new lease will be granted; valuation terms considered.

15.—HASTINGS.—Very old-established Business for sale making a net profit of over £400 per annum; main-road premises; attractive fixtures; good stock; nice living accommodation; rent £85 per annum; price about £1,000, or valuation terms entertained.

16.—BIRMINGHAM.—Middle-class Business for sale owing to retirement; takings about £12 per week, scope for increase; net profit about £5 per week; stock worth £150; rent £20 per annum inclusive; price £200 or near offer for quick sale.

17.—FOREST GATE (NEAR).—Middle-class Cash Retail Business; returns approach £2,000 per annum; gross profit £700; lock-up shop situate in marketing thoroughfare; stock worth about £370; rent £65; long lease; Vendor is desirous of immediate sale for family reasons and will accept a reasonable offer.

Chemists' Transfers, Valuations for Sale, Stocktaking & Probate

Special Terms for Income Tax Valuations and Preparation of Accounts by Qualified Accountants.

ERNEST J. GEORGE & Co.

Bank Chambers, 329 High Holborn, London,
 Telephone Nos. : Holborn 7406 & 7407 (2 lines) **W.C.1**
County Bldgs., Bridge St., Walsall Telephone : **Walsall 3774**

Lancashire and District Representative: Mr. E. BROWN, 21 Davenport Road, Hazel Grove, Stockport. Telephone : Great Moor 2405

Correspondence, mutually confidential, is invited from prospective purchasers of the following businesses at present available for purchase.

(C1) BAYSWATER (NEAR).—Old-established, good-class; main-road position; turnover £2,500-£2,750; net rent £90; excellent scope; price £1,500; alternatively half interest for £750.

(C2) BERKSHIRE (COUNTRY TOWN).—Returns £2,650; rent £100; living accommodation; price £1,450; near offer considered; steadily increasing turnover.

(C3) MIDDLESEX.—Attractive modern Pharmacy; increasing returns (now about £50 weekly); rent £104; price £1,500 all-at; owner retiring.

(C4) BOURNEMOUTH.—Main road, corner position; turnover £1,750; net profit £400-£450; low net rental; stock and fixtures £900; price £1,000 all-at; exceptional opportunity.

(C5) WANDSWORTH (NEAR).—Main road with living accommodation; returns £2,000; net profit £500; rent £78; price £1,100 all-at.

(C6) WORCESTER PARK (NEAR).—Attractive modern Pharmacy with up-to-date flat; turnover £2,350; stock and fixtures £700; price £1,100 all-at; rapidly growing district.

(C7) LEEDS.—City Business; turnover £2,200, increasing; net profit £450; price £800 or near offer; £500 down and balance by arrangement.

(C8) LONDON, E.C.—City Business; returns £2,150 and increasing; price £1,000 or offer.

(C9) NEWPORT, MON. (NEAR).—Returns £1,500; rent £75; living accommodation; price £750.

(C10) NOTTS.—Returns upwards of £1,800; rent £78; long lease; property available if required; living accommodation; reasonable price.

(C11) SURREY (SMALL TOWN).—Turnover £1,450; good scope; reasonable rental; living accommodation; price £800.

(C12) WILTS (RETIREMENT VACANCY).—Family business with large house; very low overheads; under present ownership for past 35 years; stock and fixtures £550; price £600 all-at.

(C13) STRATFORD (LONDON, E.).—Turnover nearly £2,000; rent £65; lock-up shop; price by negotiation (reasonable offer accepted).

(C14) TWICKENHAM (NEAR).—Well situated, with excellent scope; now returning about £1,170; reasonable rental; price £600 all-at.

(C15) SOUTHEM (NEAR).—Main-road position; turnover £1,820; living accommodation; price £1,050; open to offer.

(C16) EAST KENT.—Sited in rapidly developing district; returns £1,800; should definitely reach £2,500 shortly; living accommodation; stock and fixtures £700; price £1,050 or near offer.

Valuations for transfer, probate, income tax, etc., promptly executed at economical rates Agency for locums, managers, etc.

THE ASSOCIATION OF MANUFACTURING CHEMISTS, LIMITED

(Business Agency, Transfer & Valuation Department)

KIMBERLEY HOUSE, and at EXCHANGE CHAMBERS, Holborn Viaduct, LONDON, E.C.1 2 Bixteth St., LIVERPOOL.

PARKIN S. BOOTH, Valuer. Tels. : CITY Y 3691 (4 lines).

VALUATIONS. SALES OF BUSINESSES. STOCKTAKINGS.

Enquiries Invited.

BUSINESSES FOR DISPOSAL

6s. for 50 words or less ; 6d. for every additional 10 words or less, prepaid. (Box No., 1s. extra.)

BLACKPOOL.—Old-established business; lock up; central position; Kodak Agency; average yearly turnover between £1,200 and £1,400; great scope for Prescribing Herbalist or Qualified Herbal Chemist, etc.; inclusive price, £750 (stock £350 to £375); other details to genuine buyers with the necessary capital at interview only (no triflers, no agents). 192/36, Office of this Paper.

HAMMERSMITH (near).—Established 20 years; rent and rates £104; long lease; average turnover last 5 years, £1,730; excellent prospects; new flats opening October; good N.H.I.; excellent Proprietary Lines having huge sale; family reasons for sale; stock £275; net profit last year £509; £850 or near offer; no agents. 192/5, Office of this Paper.

HOVE.—Very old-established Retail and Dispensing Business for immediate disposal; lease 9 years to run; rent £130 per annum; situate in thickly populated district; double-fronted shop, ample living accommodation, part of which could be let off; no local competition. For further particulars and order to view apply 311/315, Office of this Paper.

LIVERPOOL.—A good profitable Business; main road; good neighbourhood; excellent chance for young energetic Chemist giving personal service; capital required at least £900; real bargain; only genuine buyers need apply. 191/33, Office of this Paper.

(C17) BALHAM (NEAR).—Returns £1,700; low rental; living accommodation; attractive Pharmacy; reasonable price.

(C18) MANCHESTER.—Business and property; turnover upwards of £1,600; living accommodation; price £800; property £800.

(C19) CHESHIRE.—Turnover £1,650; rent £60; rates £23 10s.; lock-up shop; first reasonable offer for quick sale.

(C20) THORNTON HEATH.—Turnover £1,300; rent £65; price £525 all-at, including very reasonable goodwill.

(C21) CHESTER (NEAR).—Old-established; now being run as Drug Store; excellent scope; returns upwards of £1,000; price £580 (stock and fixtures only); good living accommodation.

(C22) HANTS COAST.—Branch business returning £1,400; rent £60; living accommodation; price £550.

(C23) LONDON, S.W.1.—Main road; turnover £1,250 approximately; rent £110; living accommodation; price £395 all-at.

(C24) ESSEX.—Unopposed; turnover £1,400; rent £75; living accommodation; price by negotiation.

(C25) WORCESTERSHIRE.—Returning about £1,400; rent £60; living accommodation; price £1,050 all-at.

(C26) BOURNEMOUTH (NEAR).—Main-road position; excellent living accommodation; attractive Pharmacy; turnover £1,400; good scope; price £750.

(C27) BRIGHTON.—Steady family business, now under management; returns £1,100; low rental; price £550.

(C28) STOKE NEWINGTON.—Increasing turnover, now about £30 weekly; large house; low rental and price; good scope.

(C29) LIVERPOOL.—Good-class; returns upwards of £1,350; living accommodation; price £825; open to offer.

(C30) MANCHESTER.—Pharmacy with optical connection; turnover £1,340; rent £60; living accommodation; reasonable price.

(C31) SOUTHAMPTON.—Old-established, occupying strategic position; turnover nearly £3,000 and increasing; value of stock and fixtures (£1,335) accepted for quick sale.

(C32) TOTTENHAM (NEAR).—Drug Store with excellent scope under qualified proprietorship; returns £17-£20 weekly; reasonable rental; growing district; price £500 or offer.

(C33) KEW (NEAR).—Drug Store with excellent opportunities for chemist; turnover £720; good position; price £400 all-at.

(C34) STREATHAM (NEAR).—Family working-class; turnover £1,325; gross profit £499; rent £80; living accommodation; price £625 (£300 down and balance by arrangement).

LIVERPOOL.—Good middle-class Business near centre of city; rent £80 with living accommodation; turnover last year £1,418, could be increased; also good city business, turnover last year £1,451; rent £80; offers for either or both invited. Apply Hugh Jones & Lewis, Chartered Accountants, 8 Victoria Street, Liverpool.

LONDON, S.E.—Genuine business for sale, Cash Trade, Good Panel and P.H.A. scripts; owner retiring after many years; moderate rent or lease, 38 years, can be purchased if desired. Inquiries, C. H. B., 184/18, Office of this Paper.

LONDON, S.E.—Old-established Business for sale; turnover last year £1,260; beautifully-fitted spacious shop; good living accommodation; ten years' unexpired lease to run at £90 per annum; renewable; stock worth £350; valuation terms entertained; owner's ill-health makes early sale desirable. Further particulars upon application, 191/50, Office of this Paper.

LONDON, S.W.—Neglected business at present under indifferent management; capable of considerable improvement in the hands of enterprising man; opening for Optics; stock and fixtures worth £400-£500; lease, 15 years unexpired; will accept £300 cash or near offer; extended payment offers considered; no agents. 190/3, Office of this Paper.

LONDON, W.1.—Old-established business (over 100 years), near Shaftesbury Avenue; large double-fronted corner shop; fine large dry basement; profits £848 last year, now under management; excellent opportunity. Chemist, c/o A. Heyward & Co., Chartered Accountants, 15 Coleman Street, E.C.2.

MIDDLESEX.—Chemist and Optician business for immediate disposal; neglected through ill-health; present weekly takings, excluding Optical £9 to £10; good opportunity keen man; rent £80 per annum; good living accommodation; price asked, £200 all at. 191/28, Office of this Paper.

NORTH DEVON.—Recently opened Drug Store; best residential suburb of prosperous market town almost on coast; well-fitted modern premises with spacious living accommodation; no opposition possible; unique opportunity but qualification essential; returns under elderly Unqualified, about £400, but capable of enormous expansion; Offers, with or without premises would be considered. 189/7, Office of this Paper.

NORTH-WEST KENT.—Chemist-Optician, growing district; double-fronted shop; good house accommodation, garden; last year returns Pharmacy £1,226, Optics £170 (Accountant's figures). Full particulars to genuine buyers; quick sale essential; good reason for disposal. Write BM/NDK, London, W.C.1.

NOTTINGHAM.—For Sale; good-class Chemist's Business; old-established, with stock and fixtures. 192/27, Office of this Paper.

PORTSMOUTH and Southsea (near); Drug Store with sound prospects for expansion as district develops; turnover last year under £700 (increasing); definite scope for Qualified person; main road, no near opposition; Selo agency; present ownership five years; modern premises with excellent living accommodation; rent £75; exclusive goodwill, fixtures and fittings, £200; stock about £220; owner retiring. Goldsmith, London Road, Purbrook, Portsmouth.

SOUTH COAST, EAST DORSET.—New growing estate; lovely premises; trade already £17 weekly; only £475. **WEST HANTS.**—Busy main road; trade £1,630 last year; good shop and house; only £825. Others, all sizes and prices. Coxill & Mitton, Business Agents, Bournemouth, who would appreciate instructions to sell genuine businesses in the south.

SOUTH COAST.—Three miles from sea; all the year trade; 1934-35, £1,335; 1935-36, £1,516; 1936-37, £1,574, including N.H.I. £114, £153, £140; Ucal, Kodak, Selo; double-fronted shop; exceptionally pleasant house, side entrance, garden, and large well-built shed used as garage etc.; goodwill and fixtures, £550; stock at valuation, about £350; freehold, £1,250; transfer mortgage, £550 or more. 190/15, Office of this Paper.

WEST END, unique position; long-established; all cash. 192/34, Office of this Paper.

A SOUND and Old-established Drug Store business for sale in the South of England; family business, established seventy years; Kodak and Selo agency; long lease, low rental; genuine reasons for immediate disposal at a low price. Apply 191/52, Office of this Paper.

ALL Overhead Charges met by Subsidiary Business.—Exceptionally good opportunity for fully Qualified Chemist to start in main-road position without fear of failure. To those interested and wanting proof of this advertisement, write or call (Sunday no objection) to Owner, 12 Carbery Row, Southbourne, Bournemouth. Alight Irving Road 'bus stop. Telephone, Southbourne 1231.

CASH Retail and Dispensing, N.H.I.; established 50 years; owner now retiring; good position, main London road; 5 miles from City warehouses; free delivery; lease about 2 years to run; £75 per annum, exclusive. Full particulars from "Danver," 192/7, Office of this Paper.

DEATH VACANCY.—Old-established Chemist's Business for disposal in thickly populated working-class district; returns under management approximately £10 per week (could be considerably increased); lease will be granted at £1 2s. 6d. per week; inspection invited. Write 311/316, Office of this Paper.

OLD-ESTABLISHED Business, turnover £2,362; rent £88 10s.; mixed trade; extensive premises, very handsomely fitted, easily and inexpensively run; charmingly situated in beautiful country; pleasant house; good Prescribing, small Panel, good Optical connexion, big stocks; owner retiring; price £1,675 cash settlement; no reply to inquiries unless accompanied by banker's references. 192/2, Office of this Paper

OUTLYING London suburb; quickly growing district; old-established Chemist Business; main street; good living accommodation and garden; Kodak agency; low rent; lease 10 years, with option of renewal; turnover £1,400 under management; scope for large increase; stock approximately £450, fittings £250, all in at £1,200 or near offer. 191/13, Office of this Paper.

PREMISES TO LET

6s. for 50 words or less ; 6d. for every additional 10 words or less, prepaid. (Box No., 1s. extra.)

NEW MALDEN.—Excellent shops to be let or sold, each with two flats over; situated in centre of new estate, which is about a mile from nearest shops. Box No. 6, "Homefinders," 74 Victoria Street, S.W.1.

NORTH CHEAM.—Few excellent shops and flats to be let or sold; surrounded by new estates and on main road. Box No. 6, "Homefinders," 74 Victoria Street, S.W.1.

SHOP to Let.—322 King Street, Hammersmith. Ultra-modern Double-fronted, exceptionally suitable for Chemist; rent a secondary consideration to approved tenant. Owner, 48 Menelik Road, N.W.2.

SPLENDID Chance for Chemist, etc.; growing town; small competition; nearly 10,000 inhabitants; shop and flat over, or shop only; moderate rent; finest position; Horley, Surrey. Apply, W. Holdings, Sea Way, Middleton-on-Sea.

APARTMENTS

WESTCLIFF-ON-SEA.—Tivoli Private Hotel; highly recommended; moderate terms; personal supervision; one minute sea; three station. Telephone 3855. Winter vacancies; terms from October 1; limited accommodation for Hotel Guests desirous of bringing their own furniture.

PARTNERSHIPS

6s. for 50 words or less ; 1s. for every additional 10 words or less, prepaid. (Box No., 1s. extra.)

GOOD-CLASS West End Chemist, with growing business, requires Investor with £700-£1,000 with fixed interest; fully secured; Chartered Accountant's figures; a Qualified Chemist investor could take full or part-time salaried interest in the business, plus interest on investment. 191/7, Office of this Paper.

INVESTOR about to commence Retail Chemist Business at excellent new premises, requires Qualified Chemist to take full control; must be prepared to invest £200 in private company about to be formed to run business, to ensure vital interest in undertaking; minimum salary and substantial percentage of profits guaranteed by agreement. Please supply references, details of experience, etc. 191/6, Office of this Paper.

PHARMACIST, married, well-educated, Wholesale and Retail experience, desires Partnership in a Retail Business, with a view to eventual succession. A gentleman who is desirous of gradually easing off, and eventually retiring, can be assured of an honest associate with integrity. Preliminary references exchanged in confidence; all communications replied to. 191/39, Office of this Paper.

WANTED.—Junior Partner (age about 30) for new branch, unopened as yet; growing neighbourhood; small capital required. 311/313, Office of this Paper.

FINANCIAL

MANAGER of Established Medical Herbalist's Business, North London, desires loan of £250 to purchase from retiring owner; interest at 10 per cent. offered. 190/2, Office of this Paper.

AGENCIES

DISTRIBUTORS and Agents wanted for a new series of products with strong sales appeal; established connexion with Chemists essential. 311/312, Office of this Paper.

HIGH-CLASS French Perfumers of 60 years' standing, with good existing connexion throughout Great Britain, seek reliable firm prepared to market on its own account with substantial margin of profit a full range of Perfumes and Toiletries. P.C.B., 255/21, Office of this Paper.

LARGE Irish Free State Wholesale House with sound connexion amongst Chemists, Stores and Hairdressers, require additional well-advertised proprietary lines; prepared to manufacture and pack if necessary; will give excellent facilities for window advertising, showrooms, etc.; have excellent references and are prepared to deal only with first-class firms. 168/2, Office of this Paper.

APPRENTICESHIP

APPRENTICE required; young lady having passed Part I preferred. Apply Pharmacist, London Jewish Hospital, Stepney Green, E.1.

APPRENTICE wanted (male); sound training in Pharmacy, all necessary time allowed for evening classes, no premium. B. W. E. Beard, Chemist, 281 Forest Road, Walthamstow, E.17.

SITUATIONS OPEN

RETAIL (HOME)

6s. for 40 words or less ; 6d. for every additional 10 words or less, prepaid. (Box No., 1s. extra.)

BARNES.—Junior Assistant wanted for good-class Dispensing and Photographic Business; to start on October 4; first-class references essential. Apply, stating age, height and experience, and salary required, to Feltwell & Son, 90 Church Road, Barnes, London, S.W.15.

BOURNEMOUTH.—Junior Assistant required immediately for medium-class Pharmacy; used to Dispensing and Counter. Give full particulars in first letter with salary required. Lees, Chemist, Curzon Road, Bournemouth.

BRISTOL.—Junior, Unqualified Assistant; must be a good Salesman and Window-dresser, with knowledge of Photography. S. M. Lennox, Chemist and Optician, 82 Stokes Croft, Bristol.

BRISTOL.—Lady or Gentleman, recently qualified, seeking General Business Experience, in comfortable berth with easy hours, should apply with full particulars, and salary (moderate) required, to 310/506, Office of this Paper.

BRIXTON, S.W.—Qualified Man required for immediate vacancy in busy Drug Stores; must be a keen Salesman; permanency for enthusiastic worker; closed on Sundays and half-day Wednesday. State age, experience and salary required. 192/43, Office of this Paper.

EAST COAST.—Unqualified Male Assistant required, of good appearance and address; state age, height, experience and salary required, and enclose photo. A. E. Sawyer, M.P.S., 100 High Street, Southwold, Suffolk.

EXETER.—Smart Unqualified Junior, for High-Class Pharmacy. Full particulars first letter, age, height, photo, experience, salary. 310/291, Office of this Paper.

LEEDS.—Unqualified Assistant required. Apply stating age, when free, and wages required, to Hurst, Chemist, 80 Woodhouse Street, Leeds, 6.

LIVERPOOL.—M.P.S. required at once as Superintendent, part or full time; lady preferred, but not essential, for Counter and light N.H.I. (possible permanency); no Window-dressing. State age, height, experience (enclose references and photo if possible) and salary required to 192/22, Office of this Paper.

LONDON.—Qualified Assistant for middle-class business with N.H.I. Dispensing; give particulars of experience, names of references, when disengaged, age, and salary expected. Apply (letter only), Pharmacist, 115A Stoke Newington Road, London, N.16.

LONDON, E.14.—Young Qualified Assistant required as soon as possible; chiefly Dispensing and light Counter. Send full particulars of age, experience, references and salary required, when disengaged; interview required, to 191/20, Office of this Paper.

LONDON, N.—Junior Unqualified Assistant required (one having just completed Apprenticeship will suit). Please state full particulars as to age, height, experience and salary required, 188/1, Office of this Paper.

LONDON, N.W.—Wanted, good Junior Assistant, with Dispensing experience (Private and N.H.I.). Please state age, height, experience, and salary required, to "Beta," 192/17, Office of this Paper.

LONDON, N.1.—Qualified Assistant required for branch; must be honest, obliging and not afraid of work; another assistant kept. Apply, with usual particulars, also state age and wages expected, to 191/54, Office of this Paper.

LONDON, S.E.6.—Wanted immediately, Junior Assistant (male), for two weeks locum; must be reliable Dispenser. Ho'ges, 131 Rushey Green, Catford, S.E.6. (Phone: Hither Green 3761.)

LONDON Suburb.—Qualified Lady or Gentleman, for middle-class Family Retail Business, Dispensing and Photographic; preferably with view to succession. Real scope to add Optics. Flat available. If management only, state age, salary required, experience, when disengaged. Also Qualified Locum, possible permanency, September 20; Lady preferred. 191/8, Office of this Paper.

LONDON, W.1.—Pharmacist of mature age and experience shortly required as Night Assistant; post carries high remuneration to a tactful Salesman; exceptional opportunity to right man, whose references and character must bear the strictest investigation. 310/304, Office of this Paper.

LONDON, W.1.—Vacancy in high-class business for Junior (male) or Improver who has served a good apprenticeship. State experience, age, height and salary required, with photo (to be returned). 191/45, Office of this Paper.

LONDON, W.4.—Wanted, Unqualified Junior Assistant (male) in good-class Family and Dispensing Business. Apply, with full particulars, 192/40, Office of this Paper.

MANCHESTER.—Qualified Chemist and Optician (age about 30) required to Manage Branch, with house attached, in working-class district; permanency for a capable and reliable man; energetic, keen Salesman and smart Window-dresser; salary offered £4 per week, plus 25 per cent. net profit on all optical tests; free rent, rates and electric lighting. Give full particulars to 193/200, Office of this Paper.

MANCHESTER.—Wanted, smart Branch Manager (Qualified) for working-class district; state full particulars, salary and when at liberty. 193/2, Office of this Paper.

MIDLANDS.—Qualified Manager, married, smart and alert, with good Counter experience. Write, first letter stating age, experience, and salary required; living accommodation provided. 310/305, Office of this Paper.

SOUTH COAST.—Junior (male) Assistant wanted for good-class Dispensing Business; light work and easy hours. Witchell, Chemist, 1 Brighton Road, Worthing, Sussex.

STOCKPORT.—Wanted, Young Unqualified Assistant; male; single; industrial district; please state age, height, experience, salary required and when disengaged; photo if possible. Applications not answered in seven days declined with thanks. 191/48, Office of this Paper.

SURREY.—Assistant (Unqualified) required shortly; experienced Dispenser, with knowledge of Counter work and Window-dressing. Apply, stating age and experience, salary required, and enclose copies of references and photograph, 311/314, Office of this Paper.

SURREY.—Qualified Lady required at once, with good Counter experience; small N.H.I.; comfortable permanency for suitable applicant. Write, stating age, experience, salary required, 67 Sherwood Park Road, Mitcham.

WALSALL, STAFFS.—Young Unqualified Assistant required for Pharmacy in middle-class district; either sex; salary required must be moderate. Full particulars to Shelley, Chemist, Caldmore, Walsall.

A SMART, energetic, Qualified young lady required to Manage Branch Drug Department. Application, stating experience, age and wages required to be sent to Secretary, Heckmondwike and District Co-operative Society, Ltd., 3 Oak Street, Heckmondwike, not later than Thursday, September 16.

ACCOMMODATION above shop (unfurnished flat) London, N., and £4 per week; suit young Pharmacist (male), married or single; energetic, willing, first-class references. State date available. also Locum (Qualified), male or female, two weeks from September 20. Apply, 190/20, Office of this Paper.

AN experienced Unqualified Assistant required as soon as possible for a medium-class business, with N.H. Dispensing; permanency. Please state age, salary required and when available. Apply Cox, Chemist, High Street, Deal.

ASCOTTS PHARMACIES (1933), Ltd., require the services of young energetic Qualified men, also young Unqualified Assistants, both sexes. Full particulars in first instance to Ascotts Pharmacies (1933), Ltd., Wembley.

ASSISTANT (Qualified, male, not over 25), of good appearance and address, for good-class business. Apply, with usual particulars, to Grant, 9 The Broadway, Hatch End, Middlesex.

ASSISTANT (Unqualified), not under 24, with experience of good-class Dispensing and knowledge of Photography. Apply C. W. Higgins, Dispensing Chemist, 47 Market Place, Salisbury.

ASSISTANT (Unqualified) required at an early date for good-class Family and Dispensing Business. State age, experience, salary required. Applications not answered in three days declined with thanks. White, Chemist, Ashford, Kent.

ASSISTANTS, Qualified and Unqualified, required shortly. Apply, stating age, experience, reference, and salary required, to Trimming & Co., Ltd., Alton, Hants.

CIVIL SERVICE.—Vacancies for both sexes, age 15-26. Excellent pay and prospects. No experience required. Short hours and congenial duties. Write for FREE Guide to forthcoming open examinations, salaries, opportunities available, etc., to N.T.O. (Dept. 45), 335 High Holborn, W.C.1.

COMFORTABLE permanency for Unqualified Assistant, either sex, in good-class Pharmacy in Surrey, 12 miles from London. Please send details of experience, salary required, etc., to 192/14, Office of this Paper.

COMPETENT Assistant (gentleman), tall, of good address and education, required immediately for good middle-class Family and Dispensing Business; must be experienced Dispenser, good Salesman and Window-dresser. Please give full particulars of experience, age, height, salary required, and photo, if possible. Replies to 191/14, Office of this Paper.

G.P.O. ENGINEERING.—Attractive careers for young men, (18-23). Start £3 13s. weekly, rising to £680 per annum, with pension. No experience required. FREE details of openings, etc., from N.I.E. (Dept. 516), Staple Inn Buildings, W.C.1.

JUNIOR Assistant (Unqualified) (male) required for Dispensing and Counter. Apply with full particulars, age, height, salary, etc., B. W. E. Beard, M.P.S., 281 Forest Road, Walthamstow, E.17. Phone: Larkwood 1358.

JUNIOR or Improver required for Dispensing and Photographic; pleasant personality essential. Experience, references and salary required to Raymond Cope, M.P.S., "Roseville," Abbotts Road, Leek, Staffs.

LADY Assistant required in modern Pharmacy; must be a capable Dispenser and Window-dresser. Scriven, Chemist, 17 Colleshill Road, Ward End, Birmingham.

LOCUM (Qualified) required from September 17; male or female. State salary, etc., Geo. Johnson, 47 Station Road, Redhill.

LOCUM, Unqualified, capable of taking charge for 2 weeks. References, age and terms to Tyrrell, Central Drug Stores, Dover.

MANAGER, Qualified, for a branch doing a good-class country business; must have a thorough knowledge of Photographic and Toilet trades; permanency for the right man. State age, experience, salary required; photo if possible. Bates & Hunt, New Street, Wellington, Salop.

M.P.S., lady or gent., immediately, for N.E. London; moderate salary is offered with view to succession, present proprietor wishing to retire; an excellent opportunity to become proprietor-Pharmacist where little capital or possibly none would be considered. 191/26, Office of this Paper.

M.P.S. (22-24) as Assistant for usual Counter and Dispensing duties; newly Qualified would suit. Apply, with full particulars experience, salary required, etc., The Prosser Roberts Co., 13 Church Street, Camberwell, S.E.5.

PART-TIME Assistant wanted; evenings and Saturdays by arrangement; suit student. Replies to Stallard, Chemist, West Drayton, Middlesex.

PART-TIME (evenings), Qualified; S.E. London; usual middle-class; N.H.I. and Counter. Please state age and time free to P.C.B., 255/20, Office of this Paper.

PERMANENCY for young Unqualified Assistant, neat and accurate Dispenser essential; state experience and wages required. A. W. Hanson, Ltd., 23 High Street, Sidcup, Kent.

QUALIFIED Assistant for light Cash Retail Business in Barking; to take charge occasionally; hours and duties light; salary moderate; would suit elderly man. 190/6, Office of this Paper.

QUALIFIED Assistant (Lady or Gentleman) required at once; one accustomed to good-class trade preferred. Apply, giving full particulars, to Wainwright, Chemist, Eastleigh, Hants.

QUALIFIED Assistant (male or female) required for medium-class light Retail business; capable taking charge small branch; no holiday or Sunday duty; permanency. Particulars of age, height, experience, salary required, and when available, Ryley Pratt, 60 High Street, Barnet.

QUALIFIED lady Assistant required for usual Dispensing and Counter work; 10 a.m. to 8 p.m.; London. 192/4, Office of this Paper.

QUALIFIED lady or gentleman required for Retail business; easy, comfortable berth; permanency; situated South London. Apply, giving particulars as to salary, etc., to 192/16, Office of this Paper.

QUALIFIED Lady required for Retail Dispensing Business; South London; comfortable, permanent berth. Apply, giving details as to experience, salary required, to 191/12, Office of this Paper.

QUALIFIED Locum, from September 12 for two weeks. J. A. Cordey, Chemist, 28 Amptill Road, Bedford.

QUALIFIED male Assistant wanted early next month; must be a reliable Dispenser. Apply, giving full particulars of experience, age and salary required. Bates & Hunt, New Street, Wellington, Salop.

QUALIFIED male wanted shortly; N.W. London. Apply, stating age, experience, height, etc., and salary required, to Suttons, 3 Broadway, Ludgate Hill, E.C.4.

QUALIFIED man required, beginning of October, capable of taking charge of a branch; must be active and good Window-dresser; permanency for right man; must have good references; commence £4 weekly. Chemist, 64 High Street, St. Mary Cray, Kent.

QUALIFIED Man required for Branch; N.H.I., Counter, and some Manufacturing done; outdoor; £4; vacancy at once. Give full particulars, age, experience, references (which will not be taken up unless entertained), photo if possible; state height. Savage & Co., 109 St. James's Street, Brighton.

QUALIFIED Manager for small branch; easy hours, comfortable berth. Send photo, state wage and experience. Milo Turner, Chemist, Tamworth.

QUALIFIED Manager required shortly for Pharmacy in South of England; must be able to control Staff and Displays; excellent prospects to suitable man who would receive help with removal expenses. Write 311/310, Office of this Paper.

QUALIFIED Manager wanted at once; Dispensing and Counter; permanency. 191/42, Office of this Paper.

QUALIFIED young lady required for good-class Dispensing business; permanency. Please state age, experience and salary required. Starkey, 104 Holland Park Avenue, W.11.

SMART Young Lady with previous experience in Chemist's business required, particularly interested in Toilet; Dispensing not essential. Write 311/311, Office of this Paper.

TAYLORS BRITISH CHEMISTS require several Junior Unqualified Assistants for London territory; excellent opportunity for smart young men to acquire good experience; progressive salary and commission. Write, Taylors British Chemists, 70 Vauxhall Bridge Road, London, S.W.1.

UNQUALIFIED Assistant, male or female. Apply, L. Garfield, M.P.S., 5 North Parade, Mollison Way, Edgware. Edgware 4545.

UNQUALIFIED Assistant (male) wanted for high-class Pharmacy near London, about the end of September; must be a reliable Dispenser and capable Salesman; knowledge of Photography. State age, experience and salary, with photo if possible, to 191/53, Office of this Paper.

UNQUALIFIED Assistant required for London; smart Counter man and good Dispenser; salary £2 15s. per week. Full particulars to 311/309, Office of this Paper.

UNQUALIFIED Assistant, young, with good knowledge of Photography and Toilet requisites, to commence in about a month's time. Swindle, Chemist, Barnett Wood Lane, Ashted.

UNQUALIFIED Junior Assistant; good-class Family and Dispensing business; good experience Counter and Dispensing necessary. Apply, stating age, experience and salary required, and when disengaged to H. H. Cuthbert (Shortlands), Ltd., 3 Station Parade, Shortlands, Kent.

UNQUALIFIED Junior Assistant (male), wanted; Dispensing, Counter and General Retail with Photographic. Apply with full particulars, age, height, experience (photo, if possible), and salary required, to G. B. Rose, Chemist, Bullingdon Road, Oxford.

UNQUALIFIED Junior Assistant wanted; good Dispensing experience essential. Apply Righton, 511 Lord Street, Southport.

UNQUALIFIED Junior or Improver wanted, assist N.H.I. and Counter. Particulars to J. T. Davy, Ltd., 128 Fore Street, Edmonton, N.18.

UNQUALIFIED Male Assistant for secure position, with prospects; not over 30. Please send photo and full particulars in first letter. Apply 190/22, Office of this Paper.

WANDS, LTD., have a vacancy for an enthusiastic Young Assistant with sound knowledge and experience of high-class Photographic and Ciné apparatus; excellent prospects for suitable applicant. Also vacancy for a Junior with sound dispensing experience; one just finished apprenticeship suitable. State age, salary required and fullest particulars (photograph, if possible) to, 12 Haymarket, Leicester.

WANTED immediately, for Midlands industrial area, Qualified man to take sole charge of National Insurance Dispensing. State minimum salary required, to be progressive; permanency. Particulars to 191/22, Office of this Paper.

WANTED immediately, Improver or Junior just completed apprenticeship; must be good Dispenser. Apply, stating age, reference, when free, salary required and enclosing photo to W. Bates & Co., Ltd., 50 Oxford Street, Southampton.

WANTED, Qualified Retail Branch Manager; all-round experience essential; permanency; commence November 1; usual particulars to C. H. White, M.P.S., c/o C. H. White, Ltd., Ruskin House, Oldbury Road, Smethwick, Staffs.

WANTED, URGENTLY.—Qualified Manager; old-established Dispensing and Photographic Business; good N.H.I.; Manchester district; successful applicant would have opportunity of acquiring the business after trial; owner on point of retiring. Apply 310/285, Office of this Paper.

YOUNG Assistant for Photo and Optical Counter; good Window-dresser; opportunity obtain knowledge Optics; full particulars first letter, 310/292, Office of this Paper.

YOUNG lady Assistant (Junior) required for high-class Pharmacy; must have good experience in Window-dressing and Toilets. Apply by letter, stating age, height and salary required. No provincial replies. Cunningham, Dispensing Chemists, Ltd., 50 Coombe Lane, Wimbledon.

YOUNG Qualified Assistant wanted for good-class light Retail and Photographic business in pleasant country town; must be a good Dispenser. Please send full particulars in first letter. Tavener, Broadway, Crowborough.

YOUNG Qualified Man for permanency, E. London; middle and working-class trade. Apply, giving full particulars age, height, salary required; newly Qualified man would suit. 191/32, Office of this Paper.

YOUNG Unqualified Assistant, male, required for Dispensing Business in Essex. Apply, giving full particulars of age, experience and salary required, 191/46, Office of this Paper.

YOUNG Unqualified Assistant required immediately; smart Counterman and good Dispenser. State age, experience, salary, etc., photo. Apply Prossers, Ltd., Chemists, 5 Bolton Road, Walkden, near Manchester.

WHOLESALE

A **PRODUCTION MANAGER** wanted for old-established Manufacturing Pharmaceutical Business in London area. Must have complete knowledge of manufacture of Tablets, Lozenges and Pastilles and be able to produce experimental batches to new formulae. Should hold a qualification registrable under Rule 29, Poisons and Pharmacy Act. Apply, stating age, experience and salary required, to 311/317, Office of this Paper.

A **REPRESENTATIVE** required by old-established London firm of Manufacturing Perfumers and Toilet Soap Makers to cover part of Lancashire; must have a good knowledge of the trade and sound connexion with Retail Chemists and Stores. Replies will be treated in strictest confidence, and must give fullest particulars of age, experience, etc. Remuneration on salary, expenses and commission basis; car supplied. 310/299, Office of this Paper.

A **DVERTISING.**—London firm of Manufacturing Chemists requires the occasional services of a "free lance" with a knowledge of Medicine and Pharmacy, to write up short descriptive leaflets. Reply, in confidence, with particulars of experience, terms, etc., 310/308, Office of this Paper.

A **DVERTISING.**—London firm of Manufacturing Chemists require Writer with knowledge of Medicine and Pharmacy, in their Advertising Department. State experience, age and salary required to 310/290, Office of this Paper.

A **N** American Proprietary Medicine Manufacturer desires the services of a young man with selling ability and knowledge of the Drug business, to assist them in promoting sales in the English market; unusual opportunity; salary according to ability. Reply fully. Applications confidential. 310/301, Office of this Paper.

D **ICTAPHONIST** required with some knowledge of the Chemical trade. Telephone: Holborn 6093. 310/297, Office of this Paper.

F **IRM** with large resources, Factories London, Glasgow, building up National Sales Organisation, marketing New Type Bottled Undiluted Whole Fruit Orange and Grape Fruit Juice, infinitely superior and competitive in price to existing squashes, has Vitamin Values of Fresh Fruit, seeks energetic Representatives in every large town in England and Wales. Liberal Commission and first-class prospects. Only those with established connexions amongst Wholesale and better-class Retail need apply. P.C.B. 255/13, Office of this Paper.

F **OREMAN** required by London Manufacturing Chemists for large-scale process. Must have good experience of modern Mass-Production and Sterilisation methods. The situation is permanent, with a first-class salary for a first-class man. Write, stating age, experience and attainments, to 310/303, Office of this Paper.

P **HARMACISTS.**—Young men of good address and experience required for training as Medical Propagandists; progressive salaries with possibilities of reaching Administrative positions to men who have the ability to command success. 310/289, Office of this Paper.

R **EPRESENTATIVE** required by London Wholesale Druggists for Yorkshire and district, to call on Doctors and Veterinary Surgeons; preference to one with connexion in Yorkshire and with car. Apply by letter, giving fullest particulars and salary required, to 310/302, Office of this Paper.

R **EPRESENTATIVE** required for Inner London area by an old-established firm of Manufacturing Perfumers and Soap Makers; good opportunity for young man with initiative and experience of the trade; knowledge of export trade an advantage. Write, giving fullest particulars of experience, age and salary expected, 310/300, Office of this Paper.

S **ALES MANAGER** of well-known company marketing range of nationally advertised products wishes to appoint young man, under 30, to train as Assistant Sales Manager; applicants should have first-class experience as Salesmen, and preferably have spent some years in sales office of similar organisation; only first-class men with good sales records and exceptional ability need apply. State age, fullest particulars of past experience and salary required, in confidence, to 310/288, Office of this Paper.

Y **OUNG** Pharmacist with some knowledge typewriting, French and office routine, required for old-established London firm; congenial post, good prospects. Apply with full particulars to 310/293, Office of this Paper.

Y **OUNG** Qualified Chemist required immediately to undergo training in warehouse and factory of leading London firm of Manufacturing Chemists, preparatory to representing this firm as a Traveller. Reply by letter to 310/294, Office of this Paper.

Y **OUTH** who has had some experience in the Manufacture of Pills required for Pill Department. Reply, with full particulars, 310/298, Office of this Paper.

COLONIAL, INDIAN AND FOREIGN

WEST AFRICA.—A permanent and progressive career is offered to Qualified Pharmaceutical Chemists, commencing salary £400 per annum rising to £550 per annum, together with commission on profits; short tours, leave on full salary; free furnished quarters, first-class passages. The position is an attractive one to intelligent and capable young men under 30 years of age anxious to get on. 310/287, Office of this Paper.

QUALIFIED Chemist's Assistant required for Bulawayo, must possess F.S.M.C. or F.B.O.A. Diplomas, age not over thirty years, unmarried; of good personality, able to assist with Chemistry, Optics, Photography and Window-dressing; must be a good Salesman, accurate Dispenser and competent to take charge during temporary absence of principal; commencing salary £25/£30 per month; four years' contract would be arranged. Reply, giving full qualifications and copies of testimonials to Keep Bros., Ltd., Great Charles Street, Birmingham.

SITUATIONS WANTED

RETAIL (HOME)

2s. for 18 words or less; 6d. for every additional 10 words or less, prepaid. (Box No., 1s. extra.)

A.A.A.A.A.—MANAGER (39/40), over 20 years' experience all branches, London and suburbs; Qualified; excellent references; disengaged shortly. Chemist, 30 Lorne Close, Hanover Gate, N.W.8.

ASSISTANT, experienced, temporary, part-time or permanency; London district preferred; disengaged. "A.," 48 Hazelwood Avenue, Morden, Surrey.

ASSISTANT, Unqualified, male (29), married, abstainer, tall, smart appearance, seeks permanent progressive engagement with Private Chemist; experienced all branches Pharmacy, including Dispensing (heavy N.H.I.), Counter, Photography, Display, Stockkeeping, etc.; thoroughly trustworthy and reliable; wait suitable vacancy; coast preferred. 191/36, Office of this Paper.

ASSISTANT, West End experience; Counter and Dispensing; good reference; disengaged September 13; locum or permanency; London only. Write to M. G. Birch, 4 Melrose Gardens, Hammersmith, W.6.

BUYER; Perfumery, Toilets and Drugs; Qualified Lady. 191/37, Office of this Paper.

CHEMIST, Locum, experienced; recommended; excellent Prescriber; disengaged September 27-October 9; London or provinces. Chemist, 36 Buckley Road, Broudesbury, N.W.6.

DISPENSER-BOOKKEEPER (Hall) desires post Doctors, Hospital or County Council (permanent or locum); knowledge Bacteriology and Public Health work; thirteen years last post; excellent testimonials; drives car. 190/5, Office of this Paper.

EVENINGS.—Qualified Man offers services in London; experienced and reliable. Write, M.P.S., 252 Barry Road, S.E.22.

EXPERIENCED Locum, Qualified, excellent references, open for engagements after October 7, for Doncaster and Sheffield districts. 189/3, Office of this Paper.

LADY Assistant, Counter and Dispensing, requires post end of September; London or Home Counties; permanent or temporary. 189/4, Office of this Paper.

LADY Dispenser (Hall), seeks post; some experience with doctor. Miss D. Lawrence. "Wican-Croft," Hawkwell Chase, Hockley, Essex.

LADY Dispenser (Hall) seeks post with Doctor, Chemist or Institution in or near London. Miller, 63 Wallwood Road, E.11.

LADY, Qualified, young, desires position as Assistant or Manageress in Gloucestershire, Somersetshire or S. Wales; accustomed to all branches of trade, including Photography, Veterinary, Counter, Dispensing, Toilets, Prescribing. 186/9, Office of this Paper.

LOCUM, in London district; Qualified, elderly but active; moderate salary; disengaged. Apply "S.," 191/30, Office of this Paper.

LOCUM (Qualified); excellent references; Dispensing and Counter; capable; free September 11; any distance. Young, 2 Avondale Road, Sheffield.

LOCUM, September 27 to October 2 inclusive, during vacation from Managerial position; seaside preferred. M.P.S., 24 Sunbury Way, Hanworth, Middlesex.

LOCUM (Unqualified) (35); excellent recommendations; life-long Pharmacy experience, Photography, Home-Cné, etc.; free immediately; permanency considered where service and ability would be appreciated. Spencer, 14 Bowling Green Street, Leicester.

LONDON.—Lady, Qualified, Ph.C. (27), manage or assist high-class business; good experience in Dispensing, Counter, Photo and good-class Toilet; London or good-class suburb preferred. Chemist, 41 Corifton Road, Ealing, W.5.

M.P.S., well-experienced in West End and good-class Pharmacy requires responsible position; disengaged end of September; Locum work entertained. "Ian," The Pharmacy, Brighton Road, Lower Kingswood, Surrey.

MR. POXON, Chemist, Brownhills, recommends his Assistant, Mr. G. Smith, experienced (Unqualified), 26 years; free when suited; Wholesale or Retail; please state terms. Write, 85 Reeves Street, Bloxwich, Walsall.

OFFERS Solicited for services of M.P.S. (40), good appearance and address; healthy; active; irreproachable character; Veterinary, Photography, Optics; prize-winning Window-dresser; country, suburban and Hospital experience. 191/4, Office of this Paper.

PHARMACIST (31), desires position in Midlands; excellent experience and references; married; free one month from appointment. 192/28, Office of this Paper.

QUALIFIED; keen, industrious worker seeks permanency, Management preferred; excellent experience; good references. 192/44, Office of this Paper.

QUALIFIED Man (26), Square trained; high-class West End and City experience; desires progressive situation; excellent references; free one month. P.C.B., 255/15, Office of this Paper.

QUALIFIED Manager (33), tall, long London varied experience, seeks permanency, with house or flat preferred. 190/14, Office of this Paper.

QUALIFIED (34) desires change shortly; all-round experience; 8 years Managing; excellent references; London and Suburbs only; permanency. 192/12, Office of this Paper.

QUALIFIED 8 years London, Manager, desires berth; moderate salary; country preferred. Write Chemist, 18 Skeffington Road, East Ham.

QUALIFIED (29), Manager or Senior Assistant; 5 years' West End experience; salary £5 5s.; London only; permanency. 191/41, Office of this Paper.

UNQUALIFIED Assistant (28), tall, good appearance and address; 9 years' first-class Dispensing, Counter and Window-dressing experience; Midlands preferred, not essential. "Cortex," 10 Approach Road, Ramsgate.

UNQUALIFIED, Gentleman (31), requires situation; good references; London experience. Boyack, 106 Fort Street, South Shields, Durham.

UNQUALIFIED (38), Dispensing and Counter; quick Salesman; permanency preferred; disengaged. Dawson, 193 Crowborough Road, Tooting.

UNQUALIFIED (28) seeks permanent post; experienced Dispensing, high-class Toilets and Photographic; free now. 191/17, Office of this Paper.

WELL-EXPERIENCED all-round, young lady Assistant desires post; London or suburbs; highest references; particulars required. 190/8, Office of this Paper.

YOUNG Unqualified Lady Dispenser seeks post with Doctor or Chemist in London or Suburbs. 191/29, Office of this Paper.

WHOLESALE

ADVERTISER (36) desires change; very well known as Representative on South Coast and Home Counties to important firm of Proprietaries; now as Assistant Sales Manager to the same company; purely personal reasons for the change sought; carries a successful record and has something tangible to offer a house of repute. 309/267, Office of this Paper.

AMBITIOUS, energetic young man seeks position in/outdoor with Manufacturer of repute; 12 years' trade experience; real knowledge Soap-Cosmetic and Toilet Trade, Sundries, etc.; present position Assistant Manager; good education, smart appearance, keen, trained Salesman; S.W. Lancs, North Wales, West Midlands; car driver. 191/44, Office of this Paper.

DIRECTOR of Soap and Toileting company requires change; fully experienced on the Executive side, and capable to undertake complete reorganisation; sound knowledge, with creative ideas on preparation and marketing of new lines; age 32. Replies in confidence, 310/307, Office of this Paper.

DURHAM, Yorkshire, Derby, Notts.—Well-known Traveller, experienced Toilets, Patents, desires change; excellent references; own car; resident Leeds. 191/3, Office of this Paper.

FOREWOMAN.—Widow (age 35), disengaged; 6 years with leading Toilet Houses; belt work. 192/26, Office of this Paper.

GENTLEMAN seeks position in or outside Wholesale Sundries House; has connexion North Wales, Lancashire and Cheshire; drives car. 191/24, Office of this Paper.

HIGH-GRADE Salesman with long-standing connexion amongst Stores, Chemists, Hairdressers in South of England wants extra line. 191/31, Office of this Paper.

MANUFACTURER of Cosmetics seeks position; good West End experience in all branches of the business; used to modern methods and factory control; moderate salary for progressive post. P.C.B., 255/14, Office of this Paper.

PERFUMERY and Toilet Sundries Representative of well-known French Perfumery House desires a change; ground now covered: Eastern Counties, Kent, Surrey, Sussex, Hants, Cambs, Bucks, Herts and Beds; splendid connexion, over 1,000 accounts; ground preferred: Eastern Counties or Southern Counties; own car; salary, expenses, commission. 189/2, Office of this Paper.

POSITION Required; man with 20 years' experience in Patent trade; all branches. Write P.C.B., 255/2, Office of this Paper.

SALES PROMOTION.—Advertiser offers services to reputable British House on Sales Staff; encyclopædic knowledge of British and Irish Drug trade; long experience advertising, propaganda, medical literature, as well as costing, general management. Reply 310/296, Office of this Paper.

SUPERIOR Representative (30); tall, good address; live connexion Chemists and Hairdressers, N.W. Suburbs, Hertfordshire, Middlesex; desires permanent appointment house of Repute with scope advancement; energetic, adaptable; clean driving licence. 192/32, Office of this Paper.

TO PHARMACEUTICAL AND TOILET HOUSES

GENTLEMAN, with first-class Qualifications and experience, and at present Assistant Foreign Sales Manager to important London Pharmaceutical House with world-wide connexions, is desirous of similar appointment offering scope for progress. Advertiser has unique executive and business experience both in this country and abroad—Sales, Advertising, Production, Contact Work, etc.—and is an expert in currency operations, quota restrictions and Customs duties; thoroughly conversant with British and American Toilet Goods market; the opportunity of an appointment with any interested firm would be welcomed; credentials are first-class and proof of ability would be readily given. 311/318, Office of this Paper.

TRAVELLER, with established connexion London and Southern Counties; Retail experience; own car. 192/20, Office of this Paper.

WEST LANCASHIRE.—Advertiser desires Agency; Chemists' Proprietaries; sound connexion; 500 accounts; highest credentials; guarantee; proved successful salesman; remuneration £1 per week and commission. Reply, J. B. B., 26 Windermere Road, Kendal.

COLONIAL, INDIAN AND FOREIGN

INDIA.—Advertiser, nearly 20 years' experience in India and of highest repute, seeks representation in India and the East for a British firm; medical specialties: Drugs, Sundries, Toilets, Proprietaries, Perfumery, etc.; intimate knowledge Indian conditions and languages and Eastern Drug Trade; considerable experience manufacture in India of Home products under licence; interview in London. Reply 310/295, Office of this Paper.

FOR SALE

(Articles to the value of £5-£50.)

NATIONAL Cash Till, medium size, gives total, little used; snip. Write P. Collet, 10 Elsie Road, S.E.22.

MISCELLANEOUS

10s. for 60 words or less; 1s. for every additional 10 words or less, prepaid. (Box No., 1s. extra.)

CASH Registers, National, £10 to £25; over 100 to choose from, including ticket issuers; guaranteed genuine bargains at Great Britain's Cheapest and Largest Central Depot; easy terms, exchanges, repairs, supplies; complete overhauls from £3; estimates free; Box Cash Tills from 15s., new. **AMALGAMATED BUSINESS MACHINES, LTD.**, 78 Long Lane, Smithfield, E.C.1. Phone: National 0674. Machines bought for cash.

CHEMISTS' FITTINGS.—Second-hand, in excellent condition; Mahogany Drug Run, with 32 drawers, cupboard and lockers, 4 shelves above, 12 ft. long, £14 10s. Mahogany Glass-fronted Counter, 10 ft. long, £8 10s. Mahogany and Plate Glass Display Counter fitted 2 rows glass shelves, 9 ft. long, £10 10s. Mahogany Mirror Back Wall Case, 3 rows glass shelves, 5 ft. long, £17 10s. Mahogany 5-sided Sponge Case, 3 ft. high by 2 ft. 6 in. wide, £3 10s. Inspection invited. Illustrated catalogue of new modern Pharmacy Fittings on request. **F. MAUND & E. BERG (SHOW-CASES), LTD.**, Shopfitters and Shop Front Builders, 175/9 Old Street, London, E.C.1.

MANAGE YOUR OWN BUSINESS!
Facilities offered make this possible.
Write, 192/21, Office of this Paper.

WE have just enlarged some almost new Pharmacies taken over by a multiple firm and can offer outstanding bargains in practically new and modern fittings; for example: 10-ft. Ideal Serving Counter; 6-ft. Ideal Dispensing Screen; 10-ft. Drug Fitting; 6-ft. Wall Showcase, £75. Write or call **PHILIP JOSEPHS & SONS, LTD.**, 90/92 St. John Street, Clerkenwell, E.C.1. Phone Clerk. 4111/2. "Pharmacy Fitters for Over a Century."

WE HAVE WHAT YOU WANT for a FIRST-CLASS PHARMACY in OAK OR MAHOGANY, suit any size shop; new or reconditioned Fittings at reasonable price. Call or send your requirements. **RUDDUCK & CO.**, 219/227 Old Street, London, E.C.1. Phone Clerkenwell 3782 for FREE Estimate.

£9—COMPLETE CHEMIST FITTINGS at any price you wish to pay. We have erected in our showrooms a Complete Chemist's Shop with Metal Shop Front, Window Backs, Correct Window Lighting. Signs and modern Interior Fittings. Apply for Lists, **D. MATTHEWS & SON, LTD.**, "The Liverpool Shop Fitters," 14 and 16 Manchester Street, Liverpool. Est. 1848.

EXCHANGE COLUMN

2d. per word, minimum 2s. (Box No., 1s. extra.)

WANTED

ASSET of Second-hand Pharmacy Shoprounds and Dispensary Bottles required for small shop; Recess Labels. State number, size, and price required, to "Chemist," 151 Westbourne Terrace, Paddington, W.2.

CASH REGISTER, "National" Preferred; old model would do if working. Details to P.C.B., 255/4, Office of this Paper.

ARMY OF 'ASPRO' BROADSHEETERS ON THE MARCH!

Whole country covered continuously

Our broadsheet distributors are always on the move. 'ASPRO' broadsheets are delivered regularly into EVERY HOUSE IN EVERY TOWN OF THE BRITISH ISLES. The work is carried out thoroughly and systematically by our own well-paid employees — men who have a personal interest in seeing the job is done properly. The effect on sales is phenomenal—it's just like sowing seed—extra sales spring up wherever the 'ASPRO' broadsheeters go. You can secure the maximum amount of these sales for yourself by displaying 'ASPRO' advertising matter in your window. It gives people the vital reminder that YOU sell the product the whole town is hearing about. So display 'ASPRO' advertising continuously and reap the harvest of sales. And, remember—

'ASPRO'

NATIONAL ADVERTISING goes on ALL THE TIME

Link up with this enormous sales-producing force by giving the new 'ASPRO' Summer Display a prominent position in your windows.



Made in England by
ASPRO LIMITED, Slough, Bucks.

ASPRO
REG. TRADE MARK

Telephone: SLOUGH 608

'ASPRO' consists of the purest Acetylsalicylic Acid that has ever been known to Medical Science, and its claims are based on its superiority.

No proprietary right is claimed in the method of manufacture or the formula.

AYRTON'S RESERVABLE Own Name Series

of



PACKED GOODS

Over 150 products of superb quality, beautifully presented, and reserved to you exclusively, with your own name printed.

Write for samples and prices

AYRTON, SAUNDERS & CO. LTD.

34 Hanover Street
LIVERPOOL

44 North Lotts
DUBLIN

ZEAL CLINICALS

BRITISH
MADE

*The Choice
of Experts*



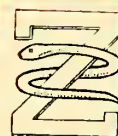
NO HIGHER
IN PRICE
THAN NON-
DESCRIPT MAKES

Also Household, Bath
& Works Thermometers.
The Best of their kind.

G. H. ZEAL LTD.

MORDEN RD., MERTON
LONDON, S.W. 19

Phone - - Liberty 2283-4-5.



"Graesser"
QUALITY

PHENOL

B.P.

in

ICE CRYSTALS DETACHED CRYSTALS
or LIQUEFIED

CRESYLIC ACID

META-PARA CRESOLS
ORTHO CRESOL
XYLENOL MIXTURES
etc., etc.

N. H. GRAESSER

The Chemical Works

SANDYCROFT, Nr. CHESTER

Telegrams: Graesser, Chester Telephone: Hawarden 104 & 105

GRAESSER SALICYLATES LTD.

Manufacturers of
ASPIRIN, B.P.

SODIUM SALICYLATE, TECHNICAL AND B.P.

SALICYLIC ACID, TECHNICAL AND B.P.

ORTHO CRESOTINIC ACID
TECHNICAL.

SODIUM PHENATE

etc.

Telegrams & Telephone: HAWARDEN 104

**THE CHEMICAL WORKS
SANDYCROFT
CHESTER**